

THE ACADEMY.

A Record of Literature, Learning, Science, and Art.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

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General Literature.

Chapman's Dramatic Works. 3 vols. London: John Pearson, York Street, Covent Garden. 1873.

It may well be questioned why Chapman's plays have only now been collected and published in a complete form for the first time. His fame as the translator of Homer, and the praises bestowed upon him by Hazlitt and Lamb, would have justified a far earlier edition in the half century which has reprinted the plays of Middleton and Lilly, Greene and Peele. The reason of this tardy justice done to Chapman may perhaps be found in his own work. Of all the Elizabethan dramatists he is the least attractive at first sight. Though some of his comedies are well conceived and carried through, yet as a tragedian he was unable to construct a plot or to work out the plan which he had laid down with lucidity. In his management of motives, that all important portion of the playwright's art, he was singularly clumsy, and his most highly studied dramas have, broadly speaking, no action or progression whatsoever. They consist of a congeries of isolated scenes. Then again he never knew when to stop in a speech or how to arrange his matter so as to present it with dramatic vividness. The fourth act of *Byron's Conspiracy*, for example, is chiefly made up of a queen's address to an ambassador and his answer, both reported by a third person. Nor could Chapman create characters. His comedies, it is true, are full of sparkling humours well sustained; but the single serious character which appears with any vividness is that of Bussy d'Ambois and Duke Byron—for these are practically the same man, and presumably either Chapman himself or else his ideal of what a hero of romance should be. His language too is very unequal. He could not distinguish between poetry and rhetoric, passion and bombast, so that some of his finest sayings seem to be the result of accident. Whole passages of philosophical reflection or political speculation, well suited enough to an essay or discourse, occur in plays the very life of which ought to be action. The Elizabethan age, rich in men of incomplete genius, whose splendid gifts were under no control, and whose works of art were a rough mixture of dross and precious metal, produced no poet more worthy than Chapman of his own description of those

"That have strange gifts in nature, but no soul
Diffused quite through, to make them all a piece."

Such a poet could never be popular, especially when his plays are neither romantic nor sensational, but crammed with weighty thoughts and tedious dissertations. Meanwhile Chapman has been called a "poet's poet;" and this title of honour he emphatically deserves. Those who are not rebuffed by his clumsiness, dryness, unreadableness, and bombast, will be repaid by the splendour of special passages, by the "full and heightened style" which Webster celebrated, by the beauty and rarity of occasional images, and by sentences of the pithiest and tersest English. Shelley, it is well known, immortalised the following four lines from *Byron's Conspiracy* by placing them on the title-page of *The Revolt of Islam*:

"There is no danger to a man, that knows
What life and death is: there's not any law
Exceeds his knowledge; neither is it lawful
That he should stoop to any other law."

In the speech from which this quotation is taken occurs a passage of brilliant bravado:

"I am a nobler substance than the stars,
And shall the baser overrule the better?
Or are they better, since they are the bigger?
I have a will, and faculties of choice
To do or not to do; and reason why
I do or not do this: the stars have none;
They know not why they shine more than this taper,
Nor how they work nor what."

Much excellent criticism as well as sound philosophy occurs by way of illustration in the mouths of the unlikeliest personages. Montsurry, in *The Revenge of Bussy d'Ambois*, well defines a poet's art in the choice of diction:

"Worthiest poets
Shun common and plebeian forms of speech,
Every illiberal and affected phrase,
To clothe their matter; and together tie
Matter and form with art and decency."

In the same play the theatre is defended on good grounds:

"Men thither come to laugh and feed fool-fat,
Check at all goodness there as being profaned:
When wheresoever goodness comes, she makes
The place still sacred, though with other feet
Never so much 'tis scandalled and polluted."

The description of Envy (vol. ii. p. 21), the character of Byron (vol. ii. p. 189), the simile of an oak tree torn by

tempest (vol. ii. p. 24), the picture drawn by D'Ambois of a scoundrel to his face (vol. ii. p. 59), King Henry's meditations on the duties and the toils of sovereignty (vol. ii. p. 284), the panegyric of passionate Love in the comedy of *All Fools* (vol. i. p. 117), Tamyra's invocation of the powers of night and silence (vol. ii. p. 33), Cato's meditations on the immortality of the soul and the legality of suicide in the tragedy of *Cæsar and Pompey* (vol. iii. pp. 176, 177, 191), are all of them passages of noble poetry too long to quote. The fault of Chapman is that some of his best thoughts and images are conveyed with a fulness of exposition that is more suited to an orator than a dramatist. He is not content with suggesting: he must needs dilate. Yet he can at times be as terse as the most sententious epigrammatist. Here are some examples:

"How blind is pride! What eagles we are still
In matters that belong to other men,
What beetles in our own!"

Or:

"Treason hath blistered heels; dishonest things
Have bitter rivers, though delicious springs."

Or:

"I fear him strangely; his advanced valour
Is like a spirit raised without a circle,
Endangering him that ignorantly raised him."

This brings the whole character of Bussy d'Ambois forcibly before us. In the same way Chapman, when he chooses, can draw a striking picture in a few words. He speaks of "Saxon lansknecchts and *brunt bearing* Switzers." He describes a river rushing violently:

"His foaming back
Loaded with cattle and with stacks of corn."

The following simile of the lull before a storm is unsurpassable:

"Here's nought but whispering with us: like a calm
Before a tempest, when the silent air
Lays her soft ear close to the earth to hearken
For that she fears steals on to ravish her."

Such are the pearls of poetry scattered freely up and down the plays of Chapman, for the sake of which he will always be read by true lovers of art. Speaking generally, the style of Chapman forms a link of connection between that of Marlowe and that of Jonson. It combines the ruffling extravagance of the one with the ponderousness of the other, Marlowe's fire with Jonson's learning. But Chapman was not a poet in the same sense as Marlowe: the comparison of their several contributions to *Hero and Leander* shows this. Nor again was he as a dramatist on a level with the author of *Volpone*.

Reckoned merely as plays, his comedies are superior to his tragedies. *All Fools*, for example, has the merit of perpetual motion in its quickly gliding scenes and intermingled interests. *May-Day* is rapid in the same style and full of incident. *A Widow's Tears* is the old tale of the Ephesian matron—borrowed from Petronius and somewhat spoiled by a double plot. The conclusion is not well worked out. Tharsalio's conquest of Eudora and the turning of the tables by Cynthia upon Lysander are not in any true dramatic sense accounted for. It may be said in passing that the same weakness of construction underlies the plot of *All Fools*. Marcantanio is such an indulgent father that no reason is shown why Fortunio should not marry Bellanora. Yet these comedies as well as *Monsieur d'Olive* and *The Gentleman Usher* are fully up to the Elizabethan standard of the comedy of humour and intrigue, as distinguished both from the grave comedy of Massinger and Jonson and also from the imaginative pleasure-plays of Shakspeare and Fletcher. They rank well with similar compositions by Marston, Middleton, Heywood, and Decker, and are dis-

tinguished by truly laughable scenes in which the manners of the time are mimicked. The same cannot be said about Chapman's tragedies. Here his want of constructive faculty, and his inability to select a truly dramatic story or to present his subject in any spirit-moving fashion, place him as a playwright below Massinger and Fletcher, not to mention such rare masters of their art as Ford and Webster. *Cæsar and Pompey* is a stationary series of heavy scenes "out of whose events," to quote the title-page, "is evicted this proposition: only a just man is a free man." *Alphonsus, Emperor of Germany* is a tissue of plots and poisonings, with a most unfortunate incident for its central point, the mixed atrocity, naïveté, and indelicacy of which could have occupied none but a semi-barbarous playwright through five acts of elaborate dullness. The four plays from French history, *Bussy d'Ambois*, *The Revenge of Bussy d'Ambois*, *Byron's Conspiracy*, and *Byron's Tragedy*, though scarcely better put together than Chapman's other dramas, occupy a higher place because of the fine poetry and deep thought with which he has adorned them, and because they set forth one eminently dramatic personality. In *Bussy d'Ambois* and the Duke Byron, Chapman has realized the character of a brave and heroic soldier, strong to dare but little apt to suffer, gifted with dazzling qualities of mind and body, quick, passionate, and finely tempered, but so overweighted with self-confidence and conceit that he reaches forward to impossibilities and allows himself to be made the instrument of inferior natures. The failure of both these men is the complement of their success. The passion for fame which impelled them to illustrious action degenerates into a mad thirst for glory, and their self-esteem becomes mere swaggering self-laudation. Byron describes himself well enough in these lines:

"Happy Semele
That died compressed with glory! Happiness
Denies comparison of less or more;
And, not at most, is nothing. Like the shaft
Shot at the sun by angry Hercules,
And into shivers by the thunder broken,
Will I be if I burst."

This is in the style of Marlowe's heroes; none of our dramatists have understood better than Marlowe and than Chapman the allurements of inordinate passions—generous affections of the soul, like the thirst for knowledge in Faustus or the desire of empire in Tamburlaine, driven to extravagance. Bussy d'Ambois is cast in the same mould as Byron: but he excites more sympathy, for a chivalrous gentleness is blent in his nature with fiery force; he loves too, and combines the culture of a scholar with the courage of a paladin. Bussy's brother Clermont is a third spirit of the same type, but differentiated by greater modesty and caution. In describing this hero after his own heart Chapman indulges us with some of his most glittering hyperboles:

"What spirit breathes thus in this more than man,
Turns flesh to air possessed, and in a storm
Tears men about the field like autumn leaves?"

And so on through a score of sounding lines until:

"All motion spent,
His fixed eyes cast a blaze of such disdain,
All stood and stared, and untouched let him lie
As something sacred fallen out of the sky."

When in their several tragedies, D'Ambois is murdered and Byron is executed for high treason, Chapman makes both of them to die raving in "King Cambyse's vein," and pouring forth such frothy praises of themselves as would be fulsome even in a paid panegyrist. Thus he enfeebles the effect of characters outlined with boldness and sustained with enthusiasm. We cannot but feel after closing his best tragedy that Dryden was justified in wishing "to burn a D'Ambois annually to the memory of Jonson,"

and that D'Urfey did not underrate its "intolerable fustian." We should have been losers in a purely literary sense by the destruction of any of Chapman's work, since it is singularly characteristic of his age; but if there was a danger in Dryden's days of playwrights being led to imitate his blustering style without a full share of his intellect, the sacrifice of Bussy d'Ambois and of Byron too for that matter would have been a benefit. It is, however, not a little amusing to hear Dryden rebuking the old poet who swayed the republic of letters in the age of James I. much after the fashion of his own dictatorship in that of Charles II. for faults so very like his own—"glaring colours," "dwarfish thought dressed up in gigantic words," "gross hyperbole," "a hideous mingle of false poetry and true nonsense," &c. Chapman, revered as the translator of Homer, as a true philosopher, and as a poet of the first rank, lived to the age of seventy-five and became in his later years a sort of oracle to rising men of letters. "He was a person," says Wood, "of most reverend aspect, religious and temperate, qualities rarely meeting in a poet." Oldys adds that "he preserved in his own person the dignity of Poetry, which he compared to the flower of the sun, that disdains to open its leaves to the eyes of a smoking taper." He was associated in dramatic labour with some of the best playwrights of the day, with Jonson and Marston and Decker and Shirley. Jonson told Drummond at Hawthornden that he "loved Chapman," and that "next himself only Fletcher and Chapman could make a Masque."

The principle upon which this edition has been made is, to quote the preface, "the *facsimile* principle, a perfectly intelligible and reasonable one, if carried out with undeviating uniformity." Intelligible no doubt this principle must be; but whether it be reasonable, in presenting the works of an old poet to the public, and not to a learned society of antiquarian scholars, may admit of question; and no one can say whether it has been carried out with uniformity without collating all the blunders of the infamously printed originals. In short it is impossible to help regretting that the editors have bestowed pains upon reproducing the misprints, bad punctuation, and confusions of the old copies, which might have been better applied to restitution of the text. I am as adverse as anyone to the principle of unacknowledged conjectural emendations; but I do not see why misspellings of names, mistakes in the *dramatis personæ*, and inversions of letters should be religiously preserved. The following passage chosen at random from *May-Day* is wholly unintelligible:—

"a friendlesse stranger
(Exild his native countrey, to remnine
Thrall to the mercy of such unknowne miads
As fortune makes the rulers of my life)."

Chapman, at the best of times a tedious author to read, becomes painfully wearisome when we have to wade through pages of queer spelling, without divisions into scenes, without a list of characters, and frequently with a most ridiculous shuffling of the persons to whom the speeches are assigned. If Chapman really "supervised in many cases the publication of the original text," as his editors believe, he must have had a patient soul and a singularly low standard of typographical accuracy. In all other respects the edition is satisfactory. Nothing has been spared in the printing, paper, and binding that could impart the agreeable appearance of a genuine old book. The memoir is as complete as the life of a poet of that age can ever be expected to be, and good sense has been shown by its author in the copious extracts from Chapman's critics which he supplies.

J. A. SYMONDS.

Myths and Mythmakers. Old Tales and Superstitions interpreted by Comparative Mythology. By John Fiske, M.A., LL.B. London: Trübner and Co.

It is not easy to say whether the above compilation, which is, as its author calls it, "a somewhat rambling and unsystematic series of papers," is intended for the professional student or the general reader.

Mr. Fiske himself has the latter in view when he says in his preface, "I have not attempted to review otherwise than incidentally the works of Grimm, Müller, Kuhn, Bréal, Dasent, and Tylor, nor can I pretend to have added anything of consequence, save now and then some bit of explanatory comment, to the results obtained by the labours of these scholars; but it has rather been my aim to present these results in such a way as to awaken general interest in them."

Under these circumstances it may well be asked why the reader is credited with such an ample knowledge of Folklore in its widest sense as to understand the slightest allusions to subjects often very remote, such as that made to the dancers of Kolbeck, and to the captain of the Phantom Ship (p. 27). Mr. Baring Gould, who mentions these two traditions in his *Curious Myths of the Middle Ages* (1st ed., vol. i., 29, 30), omits to name his authority (which is Grässe, *Der Tannhäuser und ewige Jude*, 2nd ed., Dresden, 1861, pp. 120, 122); but Mr. Fiske should have done so. Similar omissions will be too often felt by the reader, whose curiosity he thus continually balks after awakening it; though this indeed may be one of the means he speaks of "to awaken general interest."

In spite of these drawbacks he has, as we must admit, one qualification for attaining his object, in being completely master of his subject, and in knowing also how to treat it in an attractive manner. He has not failed to make some excellent observations, as when he remarks (p. 115), "Some clever play-wright, I believe it was Scribe, has said that there are only seven possible dramatic situations, that is, all the plays in the world may be classed with some one of seven archetypal dramas: if this be true, the astonishing complexity of mythology, taken in the concrete, as compared with its extreme simplicity when analyzed, need not surprise us." This remark confirms what has been already noticed in other branches of learning concerning the relative extension and narrowness of the human understanding, which seems in its workings to imitate the processes of nature, producing through the simplest means very complex results; so Pliny exclaims:—

"Jam in facie vultuque nostro, quum sint decem aut paulo plura membra, nullas duas in tot millibus hominum indiscretas effigies existere, quod ars nulla in paucis numero præstet affectando."

But Mr. Fiske has a note on the same passage which suggests a very different remark. Mr. Fiske says, "In his interesting appendix to Henderson's *Folklore of the Northern Counties of England* Mr. Baring Gould has made an ingenious and praiseworthy attempt to reduce the entire existing mass of household legends to about fifty *story roots*, and his list, though both redundant and defective, is nevertheless, as an empirical classification, very instructive." Now this list is indeed very instructive, and the attempt very ingenious and praiseworthy, only it is not Mr. Baring Gould who has made it, but the distinguished scholar, J. G. von Hahn, in the introduction to his *Griechische und Albanesische Märchen* (Leipsic, 1864). Mr. Baring Gould has done no more than make some slight changes, not however for the better, in the mode of stating this theory of *story-radicals*, as he calls them, without any acknowledgment to its real author. Mr. Baring Gould is certainly a very learned man, but at the same time the most confirmed literary annexer alive, and many other examples of his art

might be pointed out, though these are really less astonishing than the assurance with which the annexations are practised, not only from out-of-the-way books, but also from works like Hahn's, Benfey's *Pantchatantra* &c., &c., which are, or ought to be, in the hands of every student of Folklore. Yet so far as I know no reviewer of Mr. Baring Gould's publications has ever been aware of his proceedings, as best appears from the above-mentioned note of Mr. Fiske's, indeed Mr. Fiske seems to put too great faith in Mr. Baring Gould's authority, and would do well to be more cautious in borrowing any of his statements; as, for instance, the following (p. 29): "Tannhäuser was a French knight, and a renowned troubadour." Troubadour indeed! why, the very name of the *troubadour* is right German, as the mere sound of it should have sufficed to warn Mr. Fiske, and a little research would have shown him that Tannhäuser was not a *troubadour*, but a *minnesinger*, who lived about the middle of the thirteenth century, concerning whom, and the causes which made him a mythic figure, minute particulars may be found in von der Hagen's *Minnesinger* (vol. iv., p. 421, ff.) and Holland's "Sage vom Ritter Tannhäuser dessen Leben und Lieder," *Abendblatt zur neuen Münchener Zeitung*, No. 305, 308, 310; cf. Grässe, loc. cit., p. 26.

He belonged to the Austro-Bavarian family of the barons of *Tannhusen*, though later traditions call him a *Franconian knight* (ein *Fränkischer ritter*), which word Mr. Baring Gould has rendered as *French* (vol. i., p. 211), thus misleading his readers, and Mr. Fiske among them, though the latter, to do him justice, does not call the knight a troubadour. Had Mr. Baring Gould cited his authority (Grässe, l. c.) the correction of his mistake would have been easy to attentive students, but he is systematically careless in his quotations as to author, book, and chapter, especially when foreign writers are concerned.

To return to *Myths and Mythmakers*, and without thinking it necessary to develop Mr. Fiske's various statements when he himself has not chosen to do so, I will content myself with pointing out one or two more passages worthy of note. Thus he observes on philological interpretation (p. 210): "The principles of philological interpretation are an indispensable aid to us in detecting the hidden meaning of many a legend in which the powers of nature are represented in the guise of living and thinking persons; but before we can get at the secret of the myth-making tendency itself, we must leave philology and enter upon a psychological study." Similarly, Mr. Tylor remarks (*Primitive Culture*, vol. i., p. 271), "I am disposed to think, differing here in some measure from Professor Max Müller's view of the subject, that the mythology of the lower races rests especially on a basis of real and sensible analogy, and that the great expansion of verbal metaphor into myth belongs to more advanced periods of civilization. In a word I take material myth to be the primary, and verbal myth to be the secondary formation." How much philological interpretation may be abused is self-evident, and has moreover been shown by other writers, especially in reference to nouns proper, but I cannot refrain from repeating here what I have elsewhere said on this subject: "It is quite possible that Lycurgus may some day disappear altogether out of history; his travels have already been declared mythical (Max Müller, *Science of Language*, 6th ed., i, 99); but though the circumstances which seem to point to his solar divinity may be allowed on the whole as of force, I hesitate to assign much weight to the evidence derived from names alone; for though Alkander means Strongman, Lykurgos the Lightworker, Eunomos Good law, and Eukosmos Good order, it must not be forgotten that every proper name originally meant something,

and might therefore be pressed into the service of some theorist: if the Spartan legislator had been called Lake-daemon or Pythagoras instead of Lykurgos, it would have been possible, without much violence, to connect his oracular laws (*ρήτρες*) with a name indicating a higher, oracle-giving nature (*λακείν, εαίμων*), or one that spoke by the inspiration of the Pythian god; in Aristobulos, Aristotle, Homer, &c., it would have been equally possible to see a personification of a mythical legislator who bestowed excellent counsel, or pursued the best ends, or joins everything well together. As to the special question of the solar divinity, though the mythological interpretation is doubtless correct in many cases, it has to be very cautiously applied lest we should end by having everything turned into sun gods at once." These are the dangers to which people are exposed by their names, and from which even the author of *Myths and Mythmakers* himself is not safe; for descending probably from some old viking chief who in his *dreki* swam about the seas, and therefore adopted the name of "Fish" (*fiskr*), and telling as he does such pleasant and curious stories, some future mythologist may see in him only an odd fish—in the metaphorical sense of the word—and deny him an historical existence: a fate that likewise hangs over two other well-known scholars, one, Méon, a Frenchman, the other, Mone, a German, who, as Grimm points out (*Reinhart Fuchs* cclii.), being the first editors of the *Renart* and *Reinardus*, may be proved hereafter, by an easy anagram, to be *au fond* the same person. Speaking of real persons thus struck out from history puts me in mind that the *Erliking* mentioned on p. 124, may certainly be struck out from mythological lore (and from such books as Tylor's *Prim. Cult.*, ii. 282) as Mr. Fiske will feel after reading Wilhelm Grimm's observations in his *Irische Elfenmärchen*, p. lxi. In another interesting paper, that on "Light and Darkness," Mr. Fiske enumerates (p. 126, ff.) a number of amusing tales, all referring to the same subject—the Devil foiled by the superior cunning of mortals. He has however omitted one of this class which relates how a lawyer who had made over his soul to the Evil One by the usual contract, as his life drew to a close and the time for the fulfilment of the bond approached, became alarmed, and after much fruitless consultation with the most celebrated juriconsults of Europe, decided by the advice of his wife to throw the case into chancery, and thus outwitted Old Nick, who declared himself willing to give up his rights rather than submit them to the decision of that leisurely court. There is a better story of this kind, less fitted for quotation, in Rabelais (Bk. iv., ch. 45-47) of Indian origin (see Ebert's *Jahrbuch der Rom. u. Engl. Lit.*, vol. 3, p. 338), and known also in Italy, as appears by Angelo Gubernatis' *Novelline di Santo Stefano*, Torino, 1869, Novell. 34.

Mr. Fiske (p. 100) refers to an Irish story, in which a number of old women prepare to fly up the chimney by singing, "By Yarrow and Rue, and my red cap too, Hie me over to England." For the manifold magic virtues of rue see Perger's *Deutsche Pflanzensagen*, Stuttgart, 1864, p. 203. Wuttke's *Der Deutsche Volksaberglauben*, 2nd ed., Berlin, 1869, § 133. About yarrow, Perger, in his *Deutsche Pflanzensagen*, only says, "Yarrow is a remedy for convulsions in children, for the plague, and for a murrain in cattle—it was supposed to grow up wherever the tablecloth spread for a meal on Christmas Day was shaken out." It must not be forgotten that according to a superstitious belief of the Tyrolese the crumbs that fell to the ground on this occasion belonged to the dead, and there is a kindred superstition in Russia, mentioned in Ralston's interesting volume, *Songs of the Russian People*, 2nd ed., p. 321; cf. my review in *Gött. Gel. Anz.*, 1872, p. 953. FELIX LIEBRECHT.

LITERARY NOTES.

In Westermann's *Illustrated Monthly* for August, Freiherr von Maltzan gives a lively and interesting sketch of the life and opinions of a certain Hadschi Wekkes, the only *aufgeklärter* thinker it has been the writer's fortune to meet with amongst the Arabs. Hadschi Wekkes is still living, at Aden, and Maltzan reproduces from a poem of his a wonderfully simple and graphic description of a three days' journey into the mountains which he took with his flock, when a shepherd boy, to seek instruction from a saintly sage, Abdallah, who had taken refuge from the persecutions of strict, orthodox theologians in a haunted ruin. The same poem gives a slightly novel turn to a story the author professes to have heard in childhood, of a magical wood, the trees of which bear at the same time buds, blossoms, and fruit, setting and already ripe. But at the foot of every tree is a glittering serpent with sharp, red tongue, and many of those who have reached the wood through many difficulties turn back at last afraid of the serpent's venom; others, hoping the serpent may be harmless, stretch out their hands for the fruit, but are bitten, and draw back, too late, for the bite is mortal; a very few do not heed the bite in their eagerness for the fruit—which is wisdom and also the antidote to the sting of the serpent—natural human error. The doctrine of Hadschi Wekkes is represented as a very simple, natural rationalism, too simple to make converts in Arabia until he consented to mix a little of the mysticism of the Sufis with his own opinions in expounding them to beginners. He has frequently been accused of heresy by the Muftis, but the charge cannot be brought home to him; if he is asked what he believes concerning God, he replies: "I believe He is the great Unknowable," which, in Islam, is an orthodox though not the most satisfactory of answers; to a similar inquiry concerning angels, he returns: "I believe that no man can see them"—which again is orthodox as far as it goes, but not quite conclusive as to a belief in their real existence; other questions are parried with the same ingenuity. Hadschi Wekkes believes in human depravity because children and savages are unmerciful, but the last we hear of him is as posing an English clergyman who wished him therefore to believe in the Scriptural account of the Fall, by the argument that Adam must have been bad to begin with or he would not have been tempted by the apple.

In the same journal for July G. Rosen translates some weird, and, from the mythological point of view, very interesting Macedonian poems. The popular beliefs and legends of the Bulgarians, Servians, and Lithuanians are remarkable (much more so than those of the modern Greeks or Albanians) for the abundant traces and relics of paganism preserved in them, a proof of antiquity the more valuable because tradition does not seem to have much respect for the letter of the songs, which vary much from one district to another. Three of the poems translated—"Jana and the Sun," "Little Daughter Todora," and "Stoina and the Dragon"—are valuable examples of unmistakably elemental fairy tale.

Art and Archaeology.

The Metopes of Selinus. [*Die Metopen von Selinunt.*] By Otto Benndorf. Berlin, 1873.

THE brief existence of Selinus from its foundation in 651 B.C., or at the latest 628, down to its ruthless destruction by the Carthaginians in 409 B.C., forms a page of history to which the student of Greek art turns with more than usual interest. Not that artistic activity is known or supposed to have been greater there or of a higher quality than elsewhere then, but because the ruined temples of that city have yielded a series of sculptured metopes which present in one case a most peculiar and in another a most fascinating phase of Greek art, and, in particular, because these sculptures derive much additional importance from the fact that the possible limits of their date are so narrowly circumscribed. We have on the one hand four metopes (vii.-x.)

which cannot be later than 409 B.C. One would say that they must have been executed previous to 415 B.C., the date of the Athenian expedition against Sicily, the commotions arising from it having presumably been too great to permit such undertakings. It is indeed now the uniform opinion that these metopes fairly represent Greek sculpture in the condition in which Pheidias found it, that is, possessed of an overbearing tendency to minute gracefulness, but at the same time feeling its way towards the expression of life in a manner consistent with that tendency. No doubt the style which preceded Pheidias in Attica may have endured to a considerably later period elsewhere, especially in a Doric colony like Selinus. Then we have another set of metopes belonging to what is regarded as the oldest of the Selinuntian temples, and as furnishing the first authentic and as yet the clearest glimpse of that early stage of Greek sculpture when the foreign elements with which it had grown up were being fast eliminated, and the basis laid of a perfectly independent art. It is not within the range of absolute proof that these metopes belonged to a temple erected by the Selinuntians soon after their settlement about 630 or 600 B.C. All that is known is that they were part of one of the oldest of the temples of which we have still the ruins. And it is argued, first, that the character of the work points to the earliest date possible under the circumstances, and secondly that it is necessary to assume as long an interval as can be obtained between the date of their execution and that of the metopes already mentioned as reflecting the style of sculpture current just before Pheidias. Selinus was a prosperous colony from its very beginning down to its destruction by the Carthaginians, and we may be sure that in the first years of its prosperity it did not overlook the first duty of a colony, to erect a temple worthy of the protecting deity of the mother city. The only question therefore is, and it is generally answered in the affirmative, Do these metopes belong to the first temple? To account for the strangeness of the style in which they are executed, it has been found necessary not only to assign them the earliest possible date, but also to charge Egypt, the East, or Etruria, as happened to be the fashion of the time, with a depressing influence on their authors. So far as the East is concerned, meaning Assyria in particular, there is now no doubt of its having largely influenced the early development of Greek art, and though it would be difficult to point out any positively Oriental element in the metopes of which we are speaking, it would not perhaps be far wrong to assume that the native gift of gracefulness shown in the details of the figures could not have been paired with the grotesque stiffness of the action unless in the person of an artist who was growing out of the traditions of a style with which by nature he had no sympathy, and that style, of all others, the Assyrian.

Though these metopes, and especially the earliest ones, have been long duly recognised as works of the highest importance in the history of Greek sculpture, they have hitherto been neither adequately published nor examined with critical thoroughness on the spot. It is therefore with exceeding pleasure that we welcome this work of Dr. Benndorf's, in which regard has been had to both these points with a most satisfactory result. The engravings have been made from photographs, a process which presents a more apparent than real truthfulness unless assiduously watched, as we believe to have been the case here. Much new material, the result of recent or hitherto unsatisfactorily reported excavations, appears both in the plates and in the text. We have first a discussion on the topography and the public events recorded of Selinus, the latter subject recurring again further on, where, in dealing with a most interesting but very fragmentary inscription

recently found, a question arises as to a war between the people of Selinus and their neighbours of Segesta, for which as yet we have only the authority of a reasonable emendation in the text of Diodorus, xi., 86, 1-3. The inscription seems to confirm the justice of the emendation. Then follows an account of the various excavations that have been made, beginning with those of Angell and Harris, two young English architects who spent the winter of 1822-3 in exertions which, though fortunate in the highest degree to our knowledge of Greek sculpture and architecture, must be deplored for having cut off the life of Harris in the full promise of youth. The work thus interrupted was resumed in 1831 at the instance of the Duke of Serradifalco, and was attended with the discovery of three new metopes, besides the recovery of two which the previous excavators had been prevented from removing. From that time nothing more was done until the summer of 1865, when Cavallari, whose experience under Serradifalco entitled him to the position, was appointed by the Italian Government to carry on the work of exploration.

From an architectural point of view the temples of Selinus have occupied a conspicuous position ever since the publication of three of them by Wilkins in 1804-7, and considering that in many points the authorities, such as Hittorff, Bötticher, and Semper, entertain very different opinions, any successful effort to hold the balance evenly between them, and to give an essentially accurate view of the whole question, must be regarded with favour. This Dr. Bendorff has done in the chapters devoted to architecture. It should further be stated that, in order to make his work as complete as possible, he has appended a chapter on the coins of Selinus by the well-known numismatist Dr. Imhoof-Blumer.

ALEXANDER S. MURRAY.

NOTES ON ART.

Mr. John W. Wilson, who, it will be remembered, a short time ago presented to the Louvre his newly acquired fine painting by Constable, has now distinguished himself by another act of generosity. On the 15th of August at the Gallery of the *Cercle artistique et littéraire* at Brussels, he opened an exhibition of his magnificent collection of paintings by ancient and modern masters, the whole of the proceeds of the exhibition being devoted to the benefit of the poor of Brussels, which, it appears, is Mr. Wilson's native town. Mr. Wilson bears the whole expense of this exhibition, so that nothing may be deducted from the sum gained for his charitable purpose; and not only so, but he has had a catalogue prepared, which is quite a work of art in itself, being splendidly printed by Messrs. Clay of Paris, and illustrated with fifty-five fine engravings and etchings by the best engravers. This catalogue is sold at twenty francs, likewise for the benefit of the poor. Most of Mr. Wilson's pictures are of the Flemish and Dutch schools, but the English school is represented by some of its greatest painters, and the French school may also be studied in this varied and well assorted collection. The celebrated picture known as "Le Roi boit," by Jan Steen, is perhaps the chef-d'œuvre of the exhibition.

We learn from the *Chronique* that the committee formed for the celebration of the fourth centenary of the birth of Michael Angelo (May 5, 1875) has already arranged the principal articles of its programme. It has been resolved that the complete correspondence of the artist, and all the documents, published and unpublished, relating to his life and works, shall be offered to the public in a magnificent volume "édition de luxe;" that artists shall be invited to send drawings illustrative of his life, which will be photo-lithographed and published as an album; also that all the great works of Michael Angelo and the most important of his drawings shall be reproduced in like manner. It is moreover proposed that a medal shall be struck in his honour; a commemorative tablet placed on the house in which he was born at Caprese, and another on the house which

he so long inhabited at Settignano; that casts from all his principal sculptures shall be placed with his statue of David in the Tribune at Florence, and that the municipality of that city shall be invited to raise a monument in his honour.

Dr. Schliemann, whose excavations at Troy have for some time attracted universal attention, gives in a letter to the *Augsburg Gazette*, written from Troy on July 17, a fuller account than we have hitherto had of his discovery of a chest of valuables—"King Priam's treasure" as it has been called—dug up near the walls of the ancient city. Golden vessels, idols, and objects of personal adornment seem to have been thrown together into this chest in the utmost haste and confusion. In a large silver urn were found two splendid head-dresses, one of which was composed of a chain of gold twenty inches long, to which eight smaller ones were attached bearing a small idol in the shape of an owl's head at each end, apparently meant to hang down over the temples; 174 smaller chains covered with golden foliage connected the two pendants and terminated by a double leaf three-fourths of an inch long. Six bracelets, a diadem of curious workmanship, fifty-six earrings of artistic design, two small vases of the finest gold, and thousands of smaller articles such as buttons, rings, beads, stars, were likewise found in the same urn. None of the earrings it is said bear the slightest resemblance in form to those of the Egyptians, Greeks, Assyrians, or Romans, but are of quite distinct artistic workmanship. Fortunately as the urn had remained upright in the chest in which it had been originally buried, it was possible to carry it away intact, and not one single article that it contained was lost.

French art has experienced a great loss in the death, on the 7th of August, of the eminent landscapist Antoine Chintreuil, at the age of fifty-nine years. M. Chintreuil was a pupil of M. Corot, and his landscapes were usually bathed in the peculiar luminous mist that distinguished those of his master. In the Salon of this year there were two works by him, "Pluie et Soleil" and "Marée basse," both remarkable for their poetic feeling. "Chintreuil," says one of his critics, "laisse une œuvre considérable et peu connue. Il est de la race des artistes dont la célébrité grandit sur leur tombe."

The Antwerp Salon was opened on the 10th of August, and is said to be a large and fairly good exhibition. Among the foreign contributors we only notice one English name, that of Mr. J. W. Oakes. MM. Alma-Tadema, Israels, Portaels, Baron Wappers, and other names familiar to our London exhibitions are to be met with in the catalogue, which comprises no less than 1,256 works.

The *Daily Telegraph* announces that the curious remains discovered by Mr. George Smith in Assyria will shortly arrive in London. One of these is a mythological tablet on which the amorous adventures of the Goddess Ishtar, the Assyrian Venus, are recorded. The Goddess, it appears, was originally married to a Deity called the Son of Life, but she quarrelled with her husband and entered on a series of discreditable amours. She has the fatal power of bringing misfortune on all whom she loves; one object of her passion is changed into an animal and torn to pieces by his own dogs, and others are treated with similar cruelty when the fickle Goddess is tired of them. Only Izdubar, the great Assyrian ruler, has courage to resist her tempting charms, and like Adonis declines the invitations of the Goddess, whereat in a rage she returns to her celestial kingdom, and we may hope becomes reconciled with her husband the Son of Life.

The National Portrait Gallery only acquired eighteen new works during the whole of the past year. The principal of these was the portrait of Sir Thomas Gresham by Antonio Moro. The total number of visitors to the Gallery increased however to 67,039.

The *Chronique* informs us that the picture that has been most frequently copied during the past year at the South Kensington Museum is "The Surprise," by Dubufe; a bust portrait of a lady surprised at her toilette. This clever portrait painter of

the modern French school has met with no less than nineteen copyists, whereas Reynolds and Gainsborough have only had five or six in the same space of time.

Her Majesty's Commissioners, who this year made a collection of the works of John Philip, R.A., and Thomas Creswick, R.A., at the International Exhibition, have decided to follow up this course in future years with the works of other eminent deceased artists of the English school.

John Constable, R.A., Augustus Egg, R.A., David Roberts, R.A., and David Wilkie, R.A., painters in oil, and J. Coney, J. S. Cotman, F. Mackenzie, S. Prout, A. Pugin, J. M. W. Turner, R.A. (architecture only), and C. Wild, painters in water colours, are the artists selected for 1874; and owners of pictures by these artists are invited to lend them for exhibition, and are also requested to furnish as much information about them as they possess.

New Publications.

- AUTHOR OF "SAINT ABE." White Rose and Red; a Love Story. Strahan.
 BETSY LEE: A Fo'c's'le Yarn. Macmillan.
 BOTTREL, W. Traditions and Hearthside Stories of West Cornwall. Second Series. (Penzance.) Trübner.
 CLASSIKER, deutsche, d. Mittelalters. Begründet v. F. Pfeiffer. Leipzig: Brockhaus.
 FIRMIN-DIDOT, A. Recueil des œuvres choisies de Jean Cousin, peinture, sculpture, vitraux, miniatures, gravures, &c. Paris: Firmin-Didot.
 GÉRARD, Ch. Les artistes de l'Alsace pendant le moyen-âge. Colmar: Barth.
 HAMILTON, A. Contes d'Hamilton, publiés avec une Notice de M. de Lescure. II. Fleur d'Épine. Paris: Lib. des Bibliophiles.
 HARTMANN-FRANZENSHULD, E. v. Deutsche Personen-Medaillen d. xvi. Jahrh. namentlich einiger Wiener Geschlechter. Wien: Gerold's Sohn.
 HARVEY, W. W. Royston Winter Recreations in the Time of Queen Anne, metrically translated from a contemporary Latin Poem by T. Wright, M.A., physician; with Notes on Royston Memorabilia. Longmans.
 HOUDOU, J. Joyeuse entrée d'Albert et d'Isabelle. Lille au xvi^e siècle, d'après des documents inédits. Lille: Danel.
 MARGUERITES (les) de la marguerite des princesses. Texte de l'édition de 1547, publié avec introduction, notes, et glossaire, par Félix Frank. Paris: Lib. des Bibliophiles.
 SAN-MARTE. Wilhelm von Orange. Heldengedicht von Wolfram v. Eschenbach. Zum ersten Male aus dem Mittelhochdeutschen übersetzt. Halle: Waisenhause.
 STORI pisci hroatski. Knjiga V. Pjesme Nikole Dimitrovica i Nikole Naljeskovica. Agram: Cuppan.
 TRENCH, Archbp. Plutarch; his Life, his Lives, and his Morals. Four Lectures. Macmillan.
 WHITE, J. P. Lays and Legends of the English Lake Country. J. Russell Smith.

Theology.

Literature and Dogma. By Matthew Arnold, D.C.L. Smith, Elder & Co., London. 3rd edition.

WHEN I was invited to contribute a critical appreciation of Mr. Matthew Arnold's last book to the columns of the *Academy*, I felt, first, highly flattered by the honour done me, and secondly much alarmed at the prospect of venturing—as a stranger to England and English life—to pass judgment on such a writer in the presence of English readers. Mr. Matthew Arnold passes on the continent for a writer of great—and very English—originality, which places him to some extent in a position of isolation even amongst his own countrymen. There is something in the combination of daring and moderation in his ideas, of tendencies often radical with conclusions generally conservative, that seems exactly fitted to bewilder a continental intellect, especially the intellect of one belonging by birth to the category of "the average sensual man," to which Mr. Arnold thinks the

French nation *in globo* must be referred. How can I venture upon the most modest criticism without exposing myself to the retort provided in advance by a great apostle: "The natural (or sensual*) man receiveth not the things of the Spirit of God." Nevertheless I have persevered in my undertaking; every country exhibits some intellectual phenomena which have the effect of living paradoxes upon those who can only contemplate them from a distance. A philosopher whose theodicy borders upon what is elsewhere called Pantheism, or even Atheism, who admits none of the Bible miracles, who rejects the Trinity of Athanasius and the supernatural inspiration of the Scriptures, and at the same time calls himself a sincere Christian and a devout member of the Established Church of England,—such a philosopher is for most of us as inexplicable a mystery as that presented to the rigid Protestants of England by the existence of the large class of French fathers of families who have abandoned the Catholic Church, who hate the Roman clergy and are always denouncing or ridiculing them, and yet send their sons to be educated in clerical schools, and allow their wives and daughters to go to confession. If, however, English readers care to have the opinion of a foreigner upon an author and a religious theory which are both strongly national, as well as highly individual, the foreigner can only acquiesce, and prepare to do his best, reminding those who will find his attempt unsatisfactory after all of a proverb current in his native land: "La plus jolie fille du monde ne peut donner que ce qu'elle a;" a point and probably the only point in which the prince of criticism himself would resemble "la plus jolie fille du monde."

At the same time, these circumstances impose a preliminary duty upon us. Mr. Matthew Arnold has not only a great deal of learning, he has also "beaucoup d'esprit." His book is extremely attractive reading, though it treats seriously of the most serious questions. The severity of his arguments is often seasoned with humorous remarks and very ingenious illustrations. He has a way of his own of crushing an opponent while affecting to offer respectful homage, which almost recalls the *Provinciales* of Pascal, and his trinitarian history of the three Lord Shaftesburys is very amusing. One is sometimes perhaps tempted to think that the incessant repetition of the same ironic point which raised a smile the first two or three times of its occurrence, is an offence against good taste. But prudence and courtesy alike warn us not to follow him on to this ground, and we propose to consider his book as if it were not directed against any local opposition, but on its merits, leaving out all the polemical parts, as a book of European interest, discussing what may be justly called a European subject, the desirable and inevitable transformation of Christian doctrine.

Seen from this level, the book appears to us one of the most interesting documents for the contemporary history of religious ideas. It is evident that it must pass amongst conservative theologians for negative in the extreme, not to say nihilistic. But though the author puts aside as so much legend what they regard as the most important truth, nevertheless his intention is, if not conservative, at least affirmative, and his aim to construct rather than to destroy. Like so many other

* Why that unpleasant epithet *sensual*? There is absolutely nothing to prove that there is more sensuality in France than elsewhere. I think the ingenious author would have been more nearly within the bounds of truth if he had said that in almost everything France represents *the mean* in Europe. There are few points upon which we are not constrained to acknowledge the superiority of one nation or another, but on the other hand, we are second in almost every field to the different nations which surpass us each in their own. A number of details might be alleged in support of this observation, the key to many of our national qualities and national defects.

thinkers of the day, Mr. Arnold has watched the process by which the blows of independent criticism clear away the scaffolding upon which former generations relied with naïve confidence to prop the edifice of their faith and their dearest hope. There are some who resign themselves to remaining stationary amongst the ruins, believing it to be impossible to find materials there for the erection of a new sanctuary where the spirit of modern times might find comfort again as heretofore in peaceable communion with God. But there are others, and Mr. Arnold is of the number, who are too religious, too much attached to the Gospel and to the incomparable joys of which the Christian life is the sole source, to accept this melancholy quietism. Their soul is athirst for the lost, living God, it seeks him with ardour, and they try to reconstruct methodically, in conformity with the dictates of experience, and in harmony with the criticisms of science, that spiritual temple with which humanity can only dispense at the cost of falling below even the moderate level already attained. There is something very noble, generous, religious, and altogether Christian in such an endeavour, even though it were to fail; and Mr. Arnold's theological adversaries, far from reproaching him with what they think his impieties, should congratulate him on his efforts. They believe themselves to possess the treasure which Mr. Arnold thinks is in danger of being lost in their keeping, and desires to rescue for them, for others, and for himself. What more praiseworthy? Would they rather have him appear as an apostle of irreligion, or the demolisher of Christianity? They cannot prevent his state of mind from being shared by many, whose intellects have been formed by modern culture, and who have been brought to the same point, without their own will or prescience, by the general, impersonal march of contemporary thought.

One might define Mr. Matthew Arnold's theology as a religious doctrine with a positivist basis, aiming to develop itself by a purely experimental method. Perhaps he might protest against the word "theology" as applied to his theory of religion and morality; but one must call things by their right names, and however much he may differ from his predecessors or his rivals, a doctrine relating to man, God, the Bible, Jesus, his teaching and the church, is neither more nor less than a theology. Amongst the essential elements of antecedent theologies there are things for which he, evidently, has a supreme antipathy; especially all such as do not admit of experimental verification. It is apparent that the idea of the Personality of God, and of Providence, in the common acceptation of the word, are to him simply, and even revoltingly absurd. He objects to the *a priori* in religion, and if he were to be judged by his premises alone, he might be classed among the absolute sceptics who can see nothing in the religious history of the human mind but a series of dreams, or rather nightmares.

But this would be to do him crying injustice; for how does he proceed in systematising the data of experience?

He starts from the fact, which for him is axiomatic, that the proper object of religion is *conduct*; "to do what we very well know ought to be done;" and that it embraces consequently at least three-fourths of human life. We should notice the very positive persistency with which he returns again and again to this computation. If we wished to be captious, we might ask whether it is possible to measure in this way the proportionate importance of the things which form the whole of human life by the time which is occupied with them; at this rate sleep, with its inevitable adjuncts, occupying a good third of life, would be a formidable rival to religion. But leaving this detail, which does not necessarily affect the validity of the doctrine: *conduct* is then the proper and the very important object of religion. We must

not however treat morality or ethics as simply and entirely the same as religion: there is no antithesis, but a difference of degree. "The passage from morality to religion is made when to morality is applied *emotion*." Then morality, heightened and vivified by sentiment, becomes *righteousness*, the central idea of the Old Testament. God, whose essence escapes all attempts at metaphysical explanation, is, according to the experimental method, "the stream of tendency by which all things fulfil the law of their being;" and since the supreme law of man's being is to develop himself in the direction of morality, God (still experimentally) is recognized by man as "the enduring power, not ourselves, which makes for righteousness."

Such was the God of Israel. The monotheism of the Israelites proceeds from hence; that at the decisive, initial moment of their religious development, out of the many aspects of the "not ourselves" by which nations feel themselves to be overborne, they concentrated themselves exclusively upon that in which the not ourselves "makes for righteousness," and so urges us to happiness. This was the revelation, properly so called, of the Old Testament. For there is no real opposition between natural and revealed religion. The opposite of natural religion is *artificial* religion. The latter adds by way of superstructure to natural or revealed religion, a superstition, or to speak more precisely an *extra-belief*, more accommodating than pure religion to the weaknesses and appetites of the human soul, which perhaps cannot be avoided at certain times and places, but always ends by compromising the pure religion upon which it fastens as rust upon a metal. This was what happened to the Israelites when they added, or rather substituted their messianic chimera for the simple faith in a power which acts upon us, impelling us to righteousness, and through righteousness to happiness; and therefore the work of Jesus was a second revelation, grafted upon and continuing the first. He also took his stand upon the ground of righteousness, and devoted himself to restoring the conception of it in its purity, while at the same time giving a more exact description of its nature. The kingdom of heaven which he announced was still the happiness inherent in the practice of righteousness. The explanation of the value of Christianity is however to be found elsewhere than in the metaphysics of Christians; neither prophecy nor miracles furnish tenable arguments in its favour. To follow Christ is merely to embrace his righteousness and happiness. The originality of Jesus proceeds from a threefold source; his *method*, his *secret*, and his personal charm, that *ἐπιεικεία*, that *sweet reasonableness* which makes his person the strongest of all attractions towards righteousness. His method consists in bringing each man back to the examination of his inner being, to study and verify his moral condition, his needs, his inclinations, his wretchedness, and to try and test himself without ceasing. His secret is that the way to attain to true righteousness is in the act of dying to self, that is to say, of renouncing heroically all the impulses and desires of the carnal man, and the painful side of this indispensable sacrifice is compensated—as, again, is proved from experience—by the peace, the intense joy which springs from it. Such is the revelation of Jesus, brought into relief and strengthened for all ages by his personal sweetness, "the medium through which the method and the secret were exhibited," and which produces "a total impression ineffable and indescribable;" so that his disciples could condense the search after and the practice of righteousness into faith in him and ardent devotion to his person.

Still, amongst those by whom Jesus was surrounded, and still more amongst those who came after him, the *extra-belief* re-asserted itself. Christianity became superstitious,

chiefly by forgetting the *method*, or the constant reference to inner experience. Protestantism was a vigorous attempt to revert to this method, sometimes to the injury of the *secret*, which has been better preserved by Catholicism. Neither of them can aspire to reproduce the mind of Jesus in its purity; the spirit of modern times has made breaches in both strongholds. The common Protestant notions of the Bible, and the Puritanical doctrines, that still retain their popularity, of the Trinity and the Atonement, are particularly exposed to the blows of unanswerable objections. Their only value consists in the meaning which it is still possible to attach to them when translated into the language of the religious morality conformable to the essence of the Old and the New Testament. In undertaking such a translation, it has to be borne in mind that the language of the Bible is not dogmatic, but literary, poetic, approximative rather than technical; yet with this reservation the Bible remains pre-eminently the book of religion, revealing the idea of righteousness in the Old Testament, and in the New, Christ with his method and his secret. A national, historical church, which enlarges its foundations so as to include within it all who call upon the name of Christ and depart from iniquity, is much more in keeping with the present and future interests of religion than the close, narrow, and obstructive societies in which the Puritan spirit delights.

I do not think that I have omitted anything essential in this abridgment of a religious theory which does not err either by excess of vigor or excess of rigor. I might even admit that, taken in their most general sense, the author's conclusions seem to me fairly satisfactory, though I should doubt the possibility of their application to the Established Church of England. I cannot conjecture how far such a radical transformation would be possible to it without risk of apostasy or dissolution. The author evidently has a feeling of filial attachment to the venerable institution, which indeed makes him occasionally unjust to certain doctrines and certain schools. One is surprised to hear so liberal a thinker speak of Socinians, *i.e.* Unitarians, with the disdain of a High Churchman who cannot bring himself to speak of heretics except by the name of their real or supposed heresiarch. He seems on the other hand to forget the mystical profundity of Calvinist doctrines and to refuse to see any but their repulsive sides. Still I am prepared to acknowledge that in the presence of the existing tendency towards excessive subdivisions in religious thought, a truly national church must widen her boundaries as much as possible or cease to exist, and it is sincerely to be wished that the noble Church of England, to which we owe so many illustrious theologians and so many admirable works, may once more become increasingly national in this sense.

But to leave the conclusions and ascend to the premises, which I cannot think clear or admissible. Mr. Arnold's essay in religious reconstruction bears a certain analogy to the one connected with the name of Kant in the superiority accorded to the moral or ethical element over all dogmas, ceremonies, or ecclesiastical institutions. But does he succeed better than Kant in assigning to religion, properly so called, the part which lawfully belongs to it? This appears extremely doubtful. The author indeed tells us that there is a distinction between religion and morality. Morality becomes religion when "to morality is applied emotion." No doubt; but emotion of what? In Mr. Arnold's system I find no emotion except that which we experience at the thought of the "power not ourselves which makes for righteousness." This is his substitute for the answer which we should have thought preferable; that morality becomes religion when it is inspired by the love of God. Now I fear that the majority of souls are so constituted as to be ex-

tremely little moved by the thought of a power which urges us towards righteousness in much the same way as the fall of a body of water makes a mill-wheel turn.

This is the place to state the gravest objection to which this—in many ways seductive—theory is exposed. Mr. Arnold is decidedly too much afraid of the idea of the personality of God. He nowhere explains why it is that the idea repels him, but the repulsion is everywhere apparent. Doubtless he has good reason to protest when he is told that God is a *Person*; for a person is a being finite, circumscribed, opposed to other beings. But it is one thing to say that God is a *person*, and another to say that God is *personal*. By a personal God one understands not a person like you or me, but a God possessing in a far higher degree than mere human persons that consciousness and intelligence which, within the limited circle of our experience, are only possessed by personal beings. It is in vain to ask, how we can verify the fact that God possesses them. In the first place I should answer that the experimental study of the universe discloses too many ends, aims, and harmonious coincidences for it to be rationally possible to deny conscious intelligence to the sovereign mover of that "stream by which all things fulfil the law of their being." But I should say further: As soon as you tell me of a "power not ourselves which makes for righteousness," the first question that inevitably presents itself to my mind is: Is this power conscious, intelligent, that is to say personal? or is it blind, unconscious, impersonal? But why do I necessarily ask myself this question? out of simple metaphysical curiosity? By no means; it is because there depends upon its solution the further question: Shall I worship it or not? Has not Mr. Arnold observed that man no longer worships powers of which he has discovered the nature to be impersonal? Men paid fervent worship to the sun as long as they believed the sun to be somebody. From the moment when they discovered it to be only a burning globe they ceased to feel the slightest devotion to it. If the not ourselves which makes for righteousness is an unconscious force, I cannot feel for it that sacred emotion which raises morality to the rank of religion. Doubtless in consulting my own interest, rightly understood, and in conforming to reason and experience, I may yield to this power which impels me to righteousness, but there will be no religion in my acquiescence, for it will be an affair of calculation, untouched by the faintest emotion. If I were afterwards to find happiness follow from obedience to the impulse, I should only be able to feel towards the beneficent power, which was ignorant of its own existence, something like the sentiment inspired by a mineral spring of which the waters have restored my failing health. In a word, it is this power itself, this not ourselves which makes for righteousness, that constantly reveals to us the fact that it is a Spirit, that is to say not merely an influence, but life, consciousness, and love; and the revelation is made since this notion is necessary to the effect which the Power tends to produce.

It is inexact to say that the pure and simple object of religion is conduct. The moral sentiment did not give birth to the religious. In former times, and even at the present day, we know that intense religion may be found in nations and individuals combined with a very lax moral condition. The truth is that morality and religion are like two sovereigns having an equal title to the supremacy over the human soul for which they contend until at length it is discovered that the only necessary and truly beneficial application of religion to life is its moral application, and that on the other hand morality, to become solid, serious, and constant, must draw its inspiration from religion. This is the Christian view, which does not establish an antithesis between religion

and morality, but maintains their distinctness while making their influence reciprocal. Morality deals with concrete, practical life, such acts as conscience commands; religion is the sentiment, the emotions which man experiences in the presence of the Absolute, whose immensity, omnipotence, and unfathomable mysteriousness attract him, and which he represents to himself in accordance with the best light he has. This, in my judgment, is the point from whence we must start to obtain an exact notion of the relation between religion and morality; and I cannot but think that Mr. Arnold's theory would have been greatly a gainer if he had started from a less meagre, a more living, a more religious conception of the Deity.

He would have been able in this way to give a more plausible explanation of the person and the work of Christ. I agree with the author that Jesus did propose to himself to restore the true idea of righteousness and to point out its real conditions. But upon what do he himself and his disciples evidently suppose his preaching and ministry to rest? Upon the abstract notion of a "Not ourselves" (it may be unconscious), of a moralising force? By no means; but upon a feeling, intense and pure, of the living God, the feeling of God as a father. But such a sentiment is absurd in relation to an impersonal God, it is only possible or suitable in relation to a God who possesses,—granted in an indescribable degree,—but still really possesses those perfections of existence to which the conscience, the intelligence, the power of loving in man are but feeble approximations. It is only by doing great and constant violence to the gospel history that it becomes possible to separate the moral preaching of Jesus from the directly religious basis upon which it rested throughout.

Several other historical objections might be urged against this theory of purified Christianity. For instance, the history of religion by no means confirms the statement that the proper object of religion, in itself and considered in its original manifestations, was conduct. Neither can I see that history confirms Mr. Arnold's explanation of the intuitive monotheism of the ancient Israelites. Monotheism, according to history, was at first nothing more than a simple *monolatry* which only developed into a monotheism based on principle, through the action of events and of the great prophets posterior to David and Solomon. The use which Mr. Arnold makes of the fourth gospel is extremely arbitrary, and contrasts strangely with his advanced views on the general subject of Biblical interpretation. It seems at times as if he had lost sight of the formidable arguments brought by contemporary criticism against the historical character of the words attributed to Jesus in this gospel. We ought never to forget that this remarkable book, as a great and ingenious critic has observed, makes Jesus say in the first person what every Christian heart says to him in the second.

But I cannot end my examination of the work without again doing homage to the intentions and the talents of the author. I have seldom read a book more penetrated with the great need that the present age feels for a religious renovation that, without breaking with the past, will do justice to the progress accomplished by the general intelligence. Even while feeling called upon to protest against sundry allegations, I regard the general impression left by the work as wholesome and encouraging. We who agree with the author as to the necessity of recasting Christian teaching, who believe, with him, in the future of Christianity, better understood and restored to something nearer its original shape, who think, with him, that neither dogmas, priests, nor ceremonies can save, but only a disposition of the heart thirsting for righteousness, must sympathise with all the noble and upright efforts which contribute to the edification of that

future church in which all those who love Christ and his righteousness will meet together. The imperfections or omissions in particular works ought not to discourage us respecting the collective result. It is a school for mutual instruction where every one teaches the others and learns from them. All co-operate in the great work of the kingdom of God; and even while maintaining my criticisms I sincerely wish and hope that England may send us many more books as powerfully conceived, as boldly written, as instructive and giving as much food for reflection as this of Mr. Matthew Arnold.

ALBERT RÉVILLE.

Hermæ Pastor. Veterem Latinam Interpretationem e codicibus edidit Adolphus Hilgenfeld. Lipsiæ. 1873.

IN 1866 Professor Hilgenfeld gave us a beautiful edition of the Greek text of the *Pastor*, from the Sinaitic and Leipsic manuscripts, in his *Novum Testamentum extra canonem receptum*, and he has now increased our obligations to him by restoring the text of the old Latin version. It is a work for which previous labourers had prepared the way, but which was still waiting for completion. The *princeps editio* was that of Faber Stapulensis (1513), in which many arbitrary changes were made in the text, chiefly in the direction of a more classical Latin, and this has formed the basis of the vulgar text. After him Cotelierus collated three Paris manuscripts, one of which, containing, however, only a small fragment at the beginning, belongs to the ninth century. Fell collated two English ones, judged by Hilgenfeld to be of great value. These labours were made use of by subsequent editors. In 1857 Dressel edited the *Pastor* in his works of the Apostolic Fathers, with the readings of a Vatican manuscript of the fourteenth century, and also printed for the first time another Latin version from the Palatine codex, on which, however, he set much too high a value. Hilgenfeld, while availing himself of the various readings of the French and English manuscripts, has taken as the basis of his text the Vatican and another manuscript allied to it, belonging to the Dresden library, in which the *Pastor* was found between the Psalms and the Proverbs of Solomon. This manuscript also belongs to the fourteenth century.

It is needless to say that Hilgenfeld has done his work as an editor with great care and judgment, abstaining from making needless changes and indulging very sparingly in critical conjecture, but not fearing to return to the readings of the manuscripts where they have been altered into better Latin. Such words as *horripilatio* (Vis. iii. 1), which, however, was the reading of Faber, *tenebrabitur* (Mand. v. 1), altered into *obscurabitur*, or such a phrase as *sedit singularis* (Vis. i. 2), for *sola*, have a savour of barbarism which bespeak their genuineness. I cannot understand however why, in Vis. ii. 3, one of the passages on which Tischendorf relied to prove the text of Simonides to be a translation from the Latin, Hilgenfeld should give us *dices autem Magno: Ecce tribulatio*. If he relied upon the Greek it should of course be *Maximo*, but otherwise there seems to be no objection to the Vatican reading *magna ecce*, unless he preferred that of his own Dresden manuscript which gives *magna vere*. In other instances he makes a judicious use of the Greek. Thus for the vulgar *per quendam locum ad dexteram* (Vis. i. 1), where the Greek has *ἐν ἀνοδίᾳ τῶνδ*, he reads *per quendam locum desertum*. Again (Vis. i. 3), where the Vatican seems hopelessly corrupt, reading *Tamquam errarius producus domum opus suum opricum ei cui vult*, for which the *princeps editio*, omitting *domum*, has conjecturally, *exponit cui vult*, the Greek *περιβιβαται τοῦ πράγματος οὐ θεῶν* suggests the true reading *obtingit rei cui vult*, which moreover is confirmed by the reading of the old Parisian fragment, which has *obtinguit*. In some instances it may be that

Hilgenfeld has deferred too much to the Greek, but on the whole his text is no doubt as near an approach to the original form as we are ever likely to have. ROBERT B. DRUMMOND.

Contents of the Journals.

Zeitsch. f. wissensch. Theologie. Vol. xvi. No. 3.—The old and the new faith [Strauss and Lagarde]; by A. Hilgenfeld.—Thoughts on the Conscience, with reference to Gass' *Die Lehre vom Gewissen*.—On 1 Cor. xv. 20-28; by W. Grimm.—Philo and the received text of the LXX.; by C. Siegfried (continued).—The Epistle to Philemon, critically examined by H. Holtzmann. [Difficulties arising from its connexion with the Epistles to the Ephesians and Colossians].—Supplement to the essay on Josephus and Luke; by Max Krenkel. [Parallel passages confirmatory of Holtzmann's view that the author of the third Gospel and the Acts made use of Josephus].—Notices. Strack's *Prolegomena critica*; by Nöldeke.—Wittichen's *Die Idee des Reichen Gottes*; by A. H.—Weiffenbach's *Der Wiederkunftsgedanke Jesu*; by A. H.—Ranke's *Curiosities evang. Lucani fragmenta Latina*; by H. Rönsch.—Hilgenfeld's *Hermæ Pastor*; by H. Rönsch.—Works on the Florentine and Vatican Council; by A. H.

Theologisch Tijdschrift. July.—An unsuccessful attempt to describe the religion of the ancient Aryans; by C. P. Tiele. [On Schoebel's *Recherches sur la race première de la race indo-iranienne*, a learned but thoroughly uncritical work].—The question of Immortality; by S. Hoekstra. [On Miss Cobbe's essay in the *Theological*].—The narrative of Paul's flight to Damascus; by J. H. A. Michelsen. [2 Cor. xi. 32, 33, xii. 1, 7a an interpolation].—The year 1000; by J. H. Maronier. [Shows, after Dom François Plaine, that the supposed fear of the day of judgment in the year 1000 is purely imaginary].—*The Book of Ardr-Viraf*; Lenormant's *La légende de Sémiramis*; and de Labarthe's *La science des religions comparées*; rev. by C. P. Tiele.—Fürst zu Solms' on the theology of Rothe; the reprint of Kinker's work on Kant; Zöllner *Ueb. die Natur der Cometen* [appeal to scientific men on behalf of philosophical studies]; rev. by F. W. B. van Bell.

New Publications.

- BRANDES, H. *Die Königsreihen v. Juda u. Israel nach den biblischen Berichten u. den Keilschriften.* Leipzig: Dürr.
MALAN, S. C. *Original Documents of the Coptic Church.* Nutt.
OEHLER, Prof. Dr. G. F. *Theologie d. alten Testaments.* 1 Bd. Einleitung u. Mosaismus. Tübingen: Heckenhauer.
PFLEIDERER, O. *Der Paulinismus.* Ein Beitrag zur Geschichte der urchristl. Theologie. Leipzig: Fues.
STOCKMEYER, J. *Die Structur d. ersten Johannesbriefes.* Basel: Schneider.
VASCOTTI, R. P. Claro. *Institutiones historiae ecclesiasticae novi foederis.* Ed. tertia emendata et aucta novis curis Prof. Dr. Joannis Hrast. Görz: Sochar.

Physical Science.

- A Catalogue of the Collection of Cambrian and Silurian Fossils contained in the Geological Museum of the University of Cambridge. By J. W. Salter. With a Preface by the Rev. Adam Sedgwick, Woodwardian Professor of Geology in the University of Cambridge; and a Table of Genera and Index added by Professor Morris. Cambridge: University Press.

A THREEFOLD interest attaches to the volume before us. It is, as its title indicates, specially intended to be a reference-catalogue to the older palæozoic fossils in the Woodwardian Museum, the margin of each page being furnished with letters of reference corresponding with similar initials painted on the cases and drawers of the Museum.

But in addition to this primary function, it is of the highest value to geologists and palæontologists engaged in the investigation of the older rocks, on account of the lists of genera and species which it supplies, arranged in zoological order, yet divided into stratigraphical series. Each species is also furnished with authentic localities and illustrated by numerous woodcuts, which are at least of generic if not of specific value, in all cases. Several small but instructive sections are also given. Of great geological interest must likewise be reckoned the "Table showing the classification of the Lower Palæozoic Rocks," carefully drawn up by Professor Morris, who has also supplied a

summary of the contents, together with a "Table showing the range of the genera as indicated by this Catalogue."

Lastly, the *Catalogue* derives both a historical and biographical interest from the fact, that though the preface was dictated by Professor Sedgwick himself only four months before his death (when in his 87th year), yet it retains in a remarkable degree the clear, earnest, forcible style of eloquence for which his discourses before the University had long ago rendered him justly celebrated.

Prefaces were always peculiarly fascinating to Sedgwick, that which accompanies his *Synopsis of the Classification of the British Palæozoic Rocks*, published in 1851-5, extending to 106 pp. 4to. The present preface is only 33 pp. in length; in it he gives us the history of the commencement and completion of the *Catalogue*, involving the record of the sad story of poor Salter's failing health and death, and the reiteration of his own ailments—a favourite prelude to all his lectures, letters, and conversations for many years past. Passing from this we come naturally to the history of the gradual formation of the collection, and the sources from which it has mainly been derived. Considering how entirely Sedgwick devoted himself to the promotion of the interests of the University, and especially to the task of making the Woodwardian Museum under his care a really valuable and instructive repository, it is but a small share of credit which he claims when he says "the following catalogue of all the older palæozoic fossils in the Woodwardian Museum consists of specimens which have been collected by myself, or presented by my friends, or obtained by purchase during my very long tenure of office as Professor of Geology."

It is a fact that, when Sedgwick commenced to lecture, he had to collect the specimens as well as provide by his own geological labours in the field the maps and sections required to illustrate his discourses.

And here it may not be out of place to observe that prior to Sedgwick's election in 1818 the professorship seems to have become almost a sinecure, scarcely any lectures on geology having ever been given.

This chiefly arose from the singular nature of the formal duties of the Geological professor, who, according to the will of the founder, was specially appointed for the purpose of defending Dr. Woodward's views as to the nature and origin of fossils against the attacks of Dr. Camerarius of Tübingen, and his disciples or followers, an engagement to this effect being entered into by each professor on his being appointed to the chair. A sum of £10 annually had been specially left by Dr. Woodward to defray the expense of foreign correspondence and for the purchase of additional specimens; but Sedgwick's predecessors considered it wiser to devote the money to other purposes, so that, when he received the appointment, the collection of which he was put in charge consisted solely of the original cabinet of British and foreign fossils and minerals brought together in the seventeenth century by Dr. Woodward.

It is only justice to Prof. Sedgwick to state that from the first he set himself vigorously to work to remedy this deficiency, and that the £10 a year was not only spent, but was often supplemented by several hundreds of pounds besides, no small part of which was contributed by Sedgwick himself. Among the more important additions to the Museum may be mentioned Count Münster's collection, Mr. Image's Chalk fossils, Fletcher's Silurian Crinoids and Trilobites, and Leckenby's magnificent museum of Oolitic fossils, chiefly from Yorkshire, beside vast stores of specimens added from time to time from the Cambridge Greensand the Chalk and Tertiaries, principally by the personal labours of Mr. Henry Keeping, whose services

as keeper of the Museum have now for some years past been retained by the Syndicate of the University.

Sedgwick not unfrequently spent his entire vacation in geological explorations in Cumberland, Wales, Devon, or Cornwall, Scotland or Ireland, the Alps or Rhenish Provinces—sometimes in company with Murchison (who about this period (1825) had commenced his geological career)—often alone, or with the then youthful J. W. Salter in Wales, or his faithful henchman John Ruthven in his native dales of Yorkshire, or in Lancashire and Cumberland. Nor did he ever forget to collect materials for his geological museum in Cambridge, the promotion of which was a subject ever near his heart from first to last.

Sedgwick was the last man to undervalue the importance of having the collections under his charge carefully and well arranged in the manner best adapted to advance the study of geology in the University. With this view he secured the assistance of a succession of able coadjutors in the persons of Ansted, Jukes, Salter, McCoy, Barrett, and Seeley, under whose hands the treasures of the Museum were gradually brought into order, and in many cases described.

Thus the fine collections of palæozoic fossils gave origin to the *Descriptive Catalogue* of Prof. McCoy, published in 1851-55, and to the contributions to British palæontology of the same author; more recently again Mr. Seeley has published a catalogue of the Reptilia of the Secondary Strata, and a descriptive catalogue of the remains of Ornithosauria from the Cambridge Greensand founded on the specimens contained in the Museum; while the present catalogue by Mr. Salter was intended to form a supplement to McCoy's larger work.

It is natural to find that by far the larger share of Sedgwick's preface is taken up with a statement of the grounds upon which his original classification of the Cambrian rocks rests, and how it came to pass that the two fast friends, Murchison and Sedgwick, were estranged from each other, and how to this day the borders of the two great kingdoms of Cambria and Siluria remain a matter for controversy, which even the death of both their kings has not succeeded in bringing to a satisfactory conclusion. Professor Sedgwick writes as follows:—

"The stratigraphical system of nomenclature adopted in this Catalogue is essentially the same with that of Prof. McCoy's synopsis. It is based upon an actual survey, first made by myself, whereby I approximately determined in N. Wales the order of the older deposits of the whole region, and the natural groups of strata into which they might be separated.

"This might be called a great but rude problem of solid geometry, to be first solved by an elaborate examination of physical evidence, and without reference to the organic remains in the successive groups. But these groups being once established on the basis of true observation, we may then proceed to obtain the first chapters of a true history of the succession of organic types, as the tale is told in the successive strata whence they have been derived. And when we have once obtained in any extensive section a true succession of organic types, we may then, as Nature is true to her own workmanship, advance a step farther, and use that succession to help us in making out the order of the physical groups in cases where we have been imperfectly or obscurely elaborated. Thus we have two great principles of arrangement: first, by actual and laborious observation of the successive physical groups; secondly, by the order of the organic types which have been already established by a reference to the types of some well-known natural section.

"In determining a geological nomenclature these two great principles must never be lost sight of. No true nomenclature can be in conflict with the actual succession of the physical deposits; neither can it contradict the true succession of organic types. Nature does not contradict her own workmanship. This was the principle on which William Smith, whom we call the father of English geology, acted; and it was the principle on which Murchison acted when he first made known his beautiful succession in the upper part of (what he taught us to call) his Silurian system. That upper part of his system was thoroughly and beautifully worked out, and was accepted at once, and continues to maintain its place. But below the Wenlock shale, in what he called

the Lower Silurian groups, his fundamental sections utterly broke down, having no base to rest upon. He never made out the succession of his physical groups: some of them which required separation he confounded and some he put in an inverted order; and thereby he brought an inevitable incongruity into his lists of the Older Palæozoic fossils. In short, I venture to affirm that the Lower Silurian nomenclature, however widely adopted on the authority of its author, was false, because it was built upon sections that were untrue to nature; and if this assertion be true—and it is true—the discussion requires no farther argument.

"As a general rule honest truth and good taste go hand in hand; and what can be more incongruous and tasteless than to erase the classical name of Cambrian as applied to the grand mountain chains of Caernarvonshire and Merionethshire, and to substitute the word Silurian as their designation? This was done by the author of the 'Silurian system' in the first instance no doubt by mistake, and in the hope of giving a greater extent and firmer basis to his system. But when the great errors of his fundamental groups were discovered, why continue such a monstrous abuse of nomenclature? Siluria supplies us neither with the best types of the older groups, nor with any sections which clearly define their succession: Cambria supplies both. Our business here is not to consider what great service the author may have done in other regions, but to consider whether his work in Lower Siluria be true to nature. The first publication of his grand lists of 'Lower Silurian Fossils' was a great boon to geology; but the assumed stratigraphical arrangement and the grouping of the species has been a great mischief, and a drag upon its progress" (p. xiii. Introduction).

The subjoined Table by Prof. Morris, will serve to show the relative classification of the Lower Palæozoic Rocks according to

SEDGWICK (1872)		and		MURCHISON (1868).		
SILURIAN.		Ledbury Shales,			Passage Beds.	
	{	Downton Sandstone, Bone Bed		{	Tilestones and	
		and Upper Ludlow.....			Upper Ludlow.	
		Aymestry Limestone and			Aymestry Limestone	
		Lower Ludlow			Lower Ludlow.	
		Wenlock Group			Wenlock Limestone	
		Wenlock Group			and Shale.	
		Lower Wenlock Group			Woolhope Limestone	
		May Hill Group			and Shale.	
					Upper Llandovery.	
CAMBRIAN.	{	Upper	Upper Bala Group	{	Lower	Lower Llandovery.
			Middle Bala Group			Caradoc & Bala Rocks
			Lower Bala Group			Upper and Lower
			Arenig or Skiddaw Group			Llandeilo Rocks.
	{	Mid.	Tremadoc Group	{	Lingula Flags or	
			Ffestiniog Group			
			Menevian Group			
	{	Lower	Harlech Group	{	PRIMORDIALSILURIAN	
			Longmynd, Bangor.....			
			and Llanberis Group...			
					CAMBRIAN.	

The divisions adopted by Prof. Phillips (1855), by Prof. Jukes (1863), by the Survey (1863), by Sir Charles Lyell (1871), are also given by Prof. Morris. Each differs somewhat from the above in the greater divisions. Lyell makes the barrier between the Cambrian and Silurian at the top of the Tremadoc Group; Phillips, between the Arenig Group and the Llandeilo Flags, which is also the line of division adopted by the Geological Survey, although the beds are called by different names and their synonymy is not readily to be made out. Jukes calls the Middle and Upper Cambrian of Sedgwick "Lower or Cambro-Silurian."

One thing is very clear, that Murchison—although not justified by good evidences of unconformity in the strata and of a break in time and in the succession of the rocks, and a change in conditions, both lithological and palæontological—carried the day with the public, stealing a march on his old friend's boundary-line; at first, as Sedgwick intimates, by issuing a small map in the atlas published by the Society for the Diffusion of Useful

Knowledge (in 1843), "in which he (Murchison) had brushed out of sight, under a deep Silurian colour, every trace of my previous work in North Wales" (p. xxvi), and afterwards by a bold assumption of right of priority, which he ever after maintained. Of his treatment by the council of the Geological Society—(then, it is to be feared, entirely led by Murchison and completely under his control)—Sedgwick cannot evidently bring himself to speak in any measured terms. Writing of the way in which his papers were tampered with by Mr. Warburton, who totally refused him the sight of any single proof-sheet, though he applied to him again and again with increased energy after his repeated refusals, he says:—"It is no easy matter to explain an overbearing treatment such as I have described; but I believe Mr. Warburton undertook his task for the express purpose of bringing my papers into harmony with Murchison's scheme of covering all the older rocks of North and South Wales with Silurian colours. For in his Reduction (of Sedgwick's maps and sections) he again and again contrived to change my language, and make me write in a new Silurian tongue. Was this fair and honest dealing with me?" (p. xxvii.)

All through his life Sedgwick retained much of the honest, frank simplicity of manner so characteristic of the hardy dalesmen of his native county. There was a singular blending of almost womanly tenderness and affection in his nature, with a stern, uncompromising love of truth, and a healthy and hearty aversion for whatever was unjust or mean.

Thus, whilst he keenly regretted to the last his loss of Murchison's friendship—more so perhaps even than the usurpation by another of the labours of so many years of good, sound, honest geological work—yet he could never recover from the sense of unfair treatment which he felt he had so little merited either from his friend Sir Roderick or from the Geological Society; and it painfully influenced his later years, causing him to hold aloof from the geological world outside his University.

One curious and very striking result presents itself to our minds in studying Prof. Morris's summary of life-forms—namely, how very far, after all, our earliest palæozoic records must be from reaching back to that dim and distant period when life began on our earth.

It is true there is a marked difference in the relative proportions of genera even between the Cambrian and Silurian epochs, and again between the Upper and Lower Cambrian; but roughly speaking—besides plant-remains—we have representatives of six great groups of Invertebrata even in the Cambrian rocks. The following will show the relative number of genera in the two divisions:—

	Cambrian.	Silurian.
Plants.....	1	4
Protozoa.....	7	7
Hydrozoa.....	11	2
Actinozoa.....	9	24
Echinodermata.....	4	26
Annelida.....	13	7
Crustacea.....	40	21
Bryozoa.....	2	6
Brachiopoda.....	17	19
Lamellibranchiata.....	8	19
Gasteropoda.....	9	13
Heteropoda.....	2	1
Pteropoda.....	5	4
Cephalopoda.....	4	6

It is only when we reach the Downton sandstone and the Ledbury shales, the uppermost Silurian strata, that we meet with any evidence of the first known fishes *Onchus* and *Pteraspis*.

In the one group, that of the Crustacea, which appears to

be richer in genera in the Cambrian than in the Silurian, this results, in great measure, no doubt, from the recent large accessions of new genera peculiar to older rocks of late determined by Messrs. Salter and Hicks, some of which, however, may prove not to be distinct when better materials are obtained.

The Crustacea and the Cephalopoda doubtless occupied the highest places in the animal kingdom in these early times, and their functions were as important in the Cambrian and Silurian periods as that of the Fishes and Reptilia among the vertebrata of later periods and at the present day. They were the redacious types of animals whose office it was to devour not only the dead and dying, but also the surplus progeny of the palæozoic seas—a task which, from their abundance and the large size of some of their number, they were doubtless well able to perform.

Altogether the *Catalogue* enumerates about 910 named species, but many other forms are noticed, together with their localities, to which specific names are not assigned.

Much remains to be accomplished before it is possible to generalize with any degree of certainty upon this interesting question of the earliest appearance of each zoological group in time. But every such catalogue as the one before us is a step in the right direction, and our best thanks are due to the Syndics of the University Press, and especially to the Vice-Chancellor, Dr. Cookson, for the excellent manner in which it has been brought out.

HENRY WOODWARD.

Notes on Scientific Work.

Geology.

Fossils from the Phosphate Beds of Quercy.—M. P. Gervais communicates to the French Academy of Sciences (*Comptes Rendus*, vol. 77, p. 106) some notes on the fossil remains from the phosphate beds of Quercy, which he has met with in his examination of various collections made in that locality. That of M. Daudibertièr, remarkable for the number and good preservation of its specimens, contains some fine examples of *Palæotherium* analogous to those occurring in the Paris gypsum beds, and some remains of *Rhinoceros minutus* and *Acerotherium*. There are also some teeth of a mammal related to *Rhinoceros*, but differing from that genus in some essential characters. M. Gervais therefore proposes a new genus for its reception which he designates *Cadurcotherium*, and the species *Cad. Cayluxi*, from Caylux whence it was obtained; the animal was of greater height than *Rhinoceros* or *Acerotherium*. The teeth consist of the last upper molar and several lower molars; the upper being larger and narrower than that of rhinoceros. Its external face is slightly convex and the hollowing of its crown is narrow and elongated. The lower molars are smaller than in *Rhinoceros*, with collines much more oblique and less projecting; their external face is undivided and has but a slight curvature. The porcine remains from these beds consist of *Anthracotheerium*, *Anoplotherium*, *Entelodon*, *Hyotheerium*, *Cainotherium*, and a small animal allied to the latter, which possesses a well marked bar between the first and second false upper molars. The ruminants consist of *Amphitragulus* and a species of *Cervus*. There are many species of *Hienodon*, also *Cricetodon* and *Archæomys*, whilst *Peratherium*, *Aves*, terrestrial *Chelonians*, a species of *Crocodile*, *Lacertians*, and *Serpents* are all represented.

The Corundum of North Carolina and Georgia.—Dr. Lawrence Smith, who discovered emery at Gumuch-dagh, near Ephesus, and in the Grecian Archipelago in 1846-7, gives some particulars (*Comptes Rendus*, vol. 77, p. 356) of the mode of occurrence of that which has been found in great abundance during the last few years in North Carolina and Georgia. The corundum occurs in serpentine or a chrysolite rock constituting a system of veins extending over a distance of 190 miles. This system is developed on the north-west side of the Blue Mountains, and runs parallel to the principal chain at a mean distance of about ten miles from the summit, describing however a very considerable curve inwards near the source of the Little Tennessee river. For a distance of about 130 miles, extending from Mitchell Co. to Macon Co., the serpentine veins are enclosed in a hard crystalline gneiss which contains red garnet, kyanite, and pyrites. From the bend at Little Tennessee river it passes into a hornblende gneiss. At Buck's Creek and thence towards the south-west the orthoclase felspar of this rock is replaced by albite, forming an albitic syenite. With the serpentine are found chalcodony, talc, steatite, anthophyllite, tourmaline, emerylite, zoisite, albite, asbestos, actinolite, tremolite, and sometimes chromite and epidote, the corundum

being mostly associated with ripidolite (clinocllore), with the exception of the red variety which occurs in the zoisite. This serpentine or chrysotile rock is invariably the gangue of the corundum in N. Carolina and Georgia, whilst in Asia Minor the enclosing rock is crystalline limestone. Dr. L. Smith points out however that although each locality possesses its own peculiar characters, the contiguous rocks in each case are of the same geological age, and are both geologically identical with those found associated with the emery of Chester, Massachusetts.

The Tertiary Deposits of Southern Italy.—T. Fuchs describes (*Sitzungsberichte der Akad. der Wiss., Wien*, vol. 66 (1), p. 7) the results of his studies of the tertiary formation in the vicinity of Messina and Gerace in Southern Italy, which have been dealt with in numerous papers and memoirs by Prof. Seguenza and others. The author's attention was chiefly directed to the beds named by Prof. Seguenza the "Zancleén" and "Astien," the former including the white marl and coral limestone, the latter embracing the bryozoa limestone and a fine yellow sand. Fuchs' examination of these divisions leads him to the view that the "Zancleén" is not a distinctive deposit holding an intermediate position between the miocene and pliocene as regarded by Seguenza, but is true pliocene, and that both the "Astien" and "Zancleén" belong to the same geological epoch. He points out that the white marl which is often interbedded with the coral limestone is a deep sea deposit, as shown by the fossils it contains, the great bulk of these consisting of foraminifera such as *Globigerina* and *Orbulina*. These are present in such numbers that the rock might well be regarded as having at one time been *Globigerina* or *Orbulina* mud. It is in fact as typical a deep water deposit as the white chalk to which it bears a great petrographic resemblance. On the other hand the bryozoa limestone is rich in Balani, Pectens, Echinidae, and other well-known shallow water forms. Fuchs believes these two divisions to be of contemporaneous origin, and in fact to be but the same deposit under different conditions, the "Astien" being the strand formation, and the "Zancleén" the deep sea deposit.

Physiology.

Vaso-motor Action of the Lingual and Hypoglossal Nerves.

—Prof. Vulpian in a paper read before the *Société de Biologie* states that hyperemia and dilatation of the vessels occur after section either of the lingual of the fifth or of the hypoglossal nerve on the same side of the tongue; the venous blood at the same time becomes of a bright red colour. During electrical excitation of the peripheric extremity of the hypoglossal nerve, the hyperemia diminishes and the corresponding half of the tongue becomes pale, but electrical excitation of the peripheric extremity of the fifth increases all the appearances of hyperemia. Thus it would appear that both nerves contain nerves capable of causing dilatation and contraction of vessels: in the hypoglossal nerve the latter preponderate and in the lingualis the former. M. Vulpian has also made some experiments in regard to the splanchnic nerve and finds that if in curarized dogs the splanchnic nerve be divided three centim. above the left suprarenal-body the size and blood contents of the corresponding kidney are increased. The quantity of urine secreted is augmented; it becomes albuminous, but contains no epithelial cells of the tubuli or blood. On exciting the peripheric extremity of the nerves with induced electrical currents the kidney becomes pale, the veins contract, and the secretion ceases.

The Functions of the Eustachian Tube.—An essay on this subject has been published by Dr. T. F. Rumbold, of St. Louis, and a good résumé of the whole work is given in the *London Medical Record*, July 23rd, 1873. Dr. Rumbold endeavours to show: 1. That during the act of deglutition the eustachian tube is not an open passage into the tympanum. 2. That the walls of the eustachian tube are constantly in slight contact. 3. That the air continually permeates the eustachian tube into the tympanum, thus maintaining the normal air density in this cavity. 4. That the air in the normal tympanic cavity is not of equal density with that of the surrounding atmosphere, the air in the tympanum being rarefied. 5. That one of the functions of the eustachian tube is the maintenance of this normal air density. 6. That the rarefied condition of the air in the tympanum is the cause of the uniform concavity of the membrana tympani, especially that portion of it from which the "light spot" is reflected.

Elimination of Salts of Mercury in Man.—M. Byasson has performed a series of highly interesting experiments in order to determine the time it takes for a soluble mercurial salt introduced into the stomach to be detected in the urine, saliva, and sweat, and has communicated his results to Robin's *Journal d'Anatomie et de Physiologie*. He finds: 1. That mercuric bichloride taken into the stomach may be found in the urine about two hours after its ingestion. 2. It takes four hours to be found in the saliva. 3. It is not possible to detect its presence in the sweat. 4. Twenty-four hours after the ingestion of moderate doses of the salt its elimination may be considered to be achieved. 5. A part of it is to be found in the fecal matter.

The Peristaltic Movements of the Intestines.—J. P. Hougkeest van Braam (*Pflüger's Archiv*, 1873, H. vi.) has adopted Sander's method of observing the peristaltic movements of the intestines, which

consists in plunging the animal in a solution of 6-10ths per cent. of common salt at the temperature of the body and opening the abdomen beneath the surface. He has arrived at the conclusion that the pneumogastric nerve is the motor nerve of the stomach but can call forth no movements in the small intestine. Where movements of the intestine appear to have been caused by excitation of the vagus it is due, he believes, to the propulsion of part of the contents of the stomach into the intestine. The vagus has no influence upon the large intestine nor upon the uterus. The splanchnic nerves are the vaso-motor nerves of the intestine, and they constitute at the same time inhibitory nerves for the intestinal movements and for the movements of the stomach. The movements of the intestine are in a higher degree dependent on the nature of the blood and the fullness of the blood-vessels. Under normal conditions local excitations are not propagated from one point to another and cause no peristaltic movements. Antiperistaltic movements never occur under normal conditions.

On the Pressure in the Pericardium.—Dr. Adam Kiewicz and H. Jacobson observe (*Centralblatt*, 1873, No. 31) that the pressure on the external surface of the heart has never yet been measured. Carson and Donders admit that it is equal to the pressure in the pleural cavity, which last they attempted without much success to estimate indirectly. Drs. K. and J. introduced a trocar through the fourth intercostal space having a tightly fitting stilet, which was then withdrawn to a point beyond that at which a manometer was connected with the interior of the canula. The withdrawal of the stilet of course left a vacuum, but that was allowed for in accordance with the result of previous experiments. They found that the pressure on the surface of the heart was always negative in sheep, dogs, and rabbits. The amount of negative pressure varied from -3 to -5 mm. of mercury. Hence it appears that the force with which venous blood is sucked towards the heart is considerably less than has generally been admitted. Donders estimates it in the pause of respiration at $7\frac{1}{2}$ mm. of mercury, after an ordinary inspiration at about 9, and with a very deep inspiration at 30 mm. The authors in their experiments find it to be about one half the above numbers.

The Life History of a Cercomonad.—In the last part of the *Monthly Microscopical Review* (lvi.) Mr. Dallinger and Dr. Drysdale give interesting details of some protracted observations they have recently conducted on a cercomonad, and which have an important bearing on the controversy respecting spontaneous generation. They used various microscopic powers and continuously examined during sometimes as long a period as fourteen days a peculiar monad, hitherto undescribed, but which is under some circumstances developed in enormous quantities in the fluid resulting from the maceration of the head of the cod. This form passes through a remarkable series of changes, each of which might be taken for a distinct and independent creation were not its evolution perfectly regular. Whilst working on this they observed a second form which possessed only one flagellum instead of two. When mature of this form multiplies by fission for a period extending from two to eight days it becomes peculiarly amaboid, two individuals coalesce, slowly increase in size and become a tightly distended cyst. The cyst bursts, and incalculable hosts of immeasurably small sporules are poured out as if in a viscid fluid and densely packed; these are scattered, slowly enlarge, acquire flagella, become active, attain rapidly the parent form, and once more increase by fission. Experiments were next made to determine the influence of heat. An ordinary slide containing adult forms and sporules covered in the ordinary way was in seven several cases allowed to evaporate slowly and placed in a dry heat which was raised to 121°C (250°F). It was then slowly cooled and distilled water was taken up by capillary attraction. On examination all the adult forms were absolutely destroyed and no spore could be definitely identified. After being kept moist in the growing stage for some hours and watched with the 1-50th gelatinous points were seen in two out of the seven cases, which were recognised as exactly like an early stage of the developing sporule, and by careful watching these were observed to attain the small flagellate state.

New Publications.

- BALTZER, A. Der Glärnisch. Ein Problem alpinen Gebirgsbaues. Zürich: Schabelitz.
BRANDT, J. F. Untersuchungen über die fossilen und subfossilen Cetaceen Europas. St. Petersburg.
CHERBULIEZ, E. Ueber einige physikalische Arbeiten Eulers. Ein Beitrag zur Geschichte der physical. Theorien im 18ten Jahrhundert. Bern: Huber.
DI GIOVANNI, V. Storia della filosofia in Sicilia da' tempi antichi al secolo xix. Vol. I. Filosofia antica, scolastica, moderna. Palermo: Lauriel.
DALTON, Col. E. T. Descriptive Ethnology of Bengal. Thacker.
DE MACEDO, J. M. Geographische Beschreibung Brasiliens. Uebersetzt von M. P. Alves Nogueira und W. T. von Schieffer. Leipzig: Brockhaus.

- DVORÁK, V. Zur Theorie der Talbot'schen Streifen. Wien: Gerold's Sohn.
- FAUCONNET, C. Excursions botaniques dans le Bas-Valais. Basel: Georg.
- GAMBERA, P. Di Galileo Galilei considerato come fondatore del metodo sperimentale e precursore della moderna teoria dinamica. Novara: Miglio.
- GEGENBAUER, L. Note über bestimmte Integrale. Wien: Gerold's Sohn.
- GRESSLER, F.G.L. Himmel und Erde. Langensalza: Schulbuchh.
- GUERRIER, W. Leibnitz in seinen Beziehungen zu Russland und Peter dem Grossen. St. Petersburg.
- HIERONYMUS, G. Beiträge zur Kenntniss der Centrolepidaceen. Halle: Schmidt.
- KOLBE, J. Beweis eines Satzes über das Vorkommen complexer Wurzeln in einer algebraischen Gleichung. Wien: Gerold's Sohn.
- LAURENCIN, P. L'Étincelle électrique, son histoire et ses applications. Abbeville: Briez.
- MAYNARD, C. J. The Birds of Florida. Part II. Salem (Mass.).
- NEUMANN, C. Ueber die den Kräften elektro-dynamischen Ursprungs zuzuschreibenden Elementargesetze. Leipzig: Hirzel.
- NOVAKOVITZ, S. Physiologie der Stimme und der Laute. (In Serbischer Sprache.) Belgrad.
- OERSTED, A. S. Systeme der Pilze, Lichenen und Algen. Leipzig: Engelmann.
- QUENSTEDT, A. Grundriss der bestimmenden und rechnenden Krystallographie. Tübingen: Laupp.
- RAMES, J. B. Géogénie du Cautal. Paris: Savy.
- ROSE, G. Elemente der Krystallographie. 3^e Aufl. neu bearb. von A. Sadebeck. Berlin: Mittler und Sohn.
- SCHLEIDEN, M. J. Die Rose. Leipzig: Engelmann.
- STOLICZKA, F. The Brachiopoda of the Cretaceous Rocks of Southern India. Trübner.
- STOLICZKA, F. The Ciliopoda of the Cretaceous Rocks of Southern India. Part II. Trübner.
- WESSELY, J. Der europäische Flugsand und seine Kultur. Wien: Faesy und Frick.
- WEYR, E. Ueber rationale ebene Curven vierter Ordnung deren Doppelpunktangente Inflectionstangenten sind. Wien: Gerold's Sohn.
- WINCKLER, A. Integration der linearen Differentialgleichung zweiter Ordnung, deren Coefficienten lineare Functionen der unabhängigen Veränderlichen sind. Wien: Gerold's Sohn.
- ZIRKEL, F. Die microscopische Beschaffenheit der Mineralien und Gesteine. Leipzig: Engelmann.

History.

Councils and Ecclesiastical Documents relating to Great Britain and Ireland. Edited, after Spelman and Wilkins, by A. W. Haddan and W. Stubbs. Vol. 2, part 1. Clarendon Press.

THIS volume completes the account of the Celtic churches in Great Britain, Ireland being reserved for the second part. It contains all that is known about the church of Cumbria or Strathclyde (A.D. 600-1188); the British churches abroad, viz. in Armorica (387-818) and at Bretoña in Galicia (569-830); and the church of Scotland until declared independent of the see of York (400-1188).

The Celtic church suffered a destiny as hard as that of the Celtic State. Their missionaries converted Scotland, and North and Central England, only to see the result of their labours appropriated by the ever encroaching power of Rome. Their missions to the continent shared a nearly similar fate. The Papacy gave Scotland to the see of York, Wales to that of Canterbury, Brittany to that of Tours; a stroke of the pen handed over Ireland to the Anglo-Norman church. The Scots-Irish schools had trained a series of great men, and able scholars such as John Scotus Erigena, men who had the widest intellectual range during those ages: but the Danish invasions destroyed these schools, and with them the very means of future instruction. An element of intellectual activity which might have been of the greatest importance was thus lost to the Western world; and an independent organization destroyed which might have held its own against the growing autocracy of Rome. A large part of the materials for its history has consequently perished,

though the Celtic MSS. of S. Gallen and other monasteries abroad are still of the greatest value.

The pressure of the English and Norman races on the Celts not only displaced their tribes but their traditions, and the history of their saints has consequently been in some cases as it were relocalised. As the population was forced on into Wales and Cornwall, a series of emigrations naturally took place to the coast of Armorica, which thus got the name of Brittany. These tribes had always lent a helping hand to each other across the Channel; Cæsar found that the Veneti were strongly reinforced by their British allies from the opposite shore. Following the earlier colony (that of Maximus' soldiers in 387), fresh emigrants passed over in 450 and 512 and 561, all of them Christian Britons—though we have traces of paganism still in Cornwall and at Vannes and Leon. It is possible that the great calamities they suffered from the Anglo-Saxons and from pestilence may have impressed many others as well as Gildas, who has left us his Lament "De Excidio Britanniae," and who was himself one of the emigrants. At any rate there seems to have been a revival of religious feeling after the disastrous war. S. David reorganised discipline in Wales, and S. Samson and S. Paul (S. Pol de Leon) came from Cornwall to Dol and Leon respectively to preach to the emigrants. Not only were the local names Cornugallia and Domnonia transferred, but there is a considerable correspondence of names of all kinds on the two coasts, S. Briuc, S. Budoc, Landevenech, and the like. In fact the intercourse between South Wales, Cornwall, and Brittany must have been very close throughout the sixth century. Oudoceus son of Budic came from Cornwall to Armorica to be prince of that country. And the Litany printed at p. 81, probably of the tenth century, might just as well be Cornish as Breton, if we look at the names of the saints commemorated in it (very different from the Scotch list in p. 279), Samson, Brioc, Melorus (Cornish, not Breton), Guinwaloe, Corentinus, Paul, Guoidwale, &c.—especially as it prays for the "plebs et clerus Anglorum" as well as for "rex et episcopus," since the Cornish, as well as the Breton church, was now leaning for protection on the Anglo-Saxon kings, as we see from the "Bodmin Gospels" in the British Museum. The wild shores of Cornwall were a favourite resort of the Welsh and Irish devotees, though the wildness which attracted them had no charm for the Anglo-Saxons, as we see by the complaint of Aldhelm's pupil Æthelwald (writing before 706, Jafé 3, 38):

"Sicut pridem pepigeram—quando profectus fueram
Usque diram Domnoniam—per carentem Cornubiam
Florulentis cespitibus—et focundis graminibus."

Perhaps Æthelwald was taking Aldhelm's letter to Gerontius, written to persuade the Celtic church to adopt the Roman date of celebrating Easter. The variance had only arisen from a different mode of calculating the right time, and the wonder rather is that any agreement could be ultimately come to at all than that there should have been disputes. On the other question, that of the tonsure, Aldhelm of course quotes the great religious romance of the Clementines, which the ecclesiastics had adopted from a most heretical source. How late the devotees persisted in betaking themselves to the desolate Cornish shores is clear from the Anglo-Saxon Chronicle a. 892, where mention is made of three Scots drifting in a boat from Ireland to Cornwall for the love of the pilgrimage. The somewhat restless activity of the Celtic missionaries is noted by Gildas, "transnavigare maria terrasque spatiosas transmeare non tam piget [Britannos sacerdotes] quam delectat;" and there was then no difficulty of language, for Giraldus Cambrensis notes as late as A.D. 1215 that the Cornish and Bretons spoke nearly the same tongue, intelligible to most of the Welsh also—except perhaps in

the north. Our editors have noted yet another British church abroad, at Bretoña in Galicia, but it was destroyed by the Moors. There has been always a sort of connexion between North Spain and the Celts of Great Britain and Ireland, and Spain had acknowledged the British Emperor Constantine (as it had Maximus before him); and Constantine had put his son Constans in possession of the country. The run across from Corunna to Falmouth is very easy and was the favourite passage for ambassadors in the Middle Ages; Cæsar already notices that "one side of Britain looks towards Spain" (v. 12), and Milton summing up a mediæval legend speaks of S. Michael's Mount,

"Where the great Vision of the guarded Mount
Looks towards Namancos and Bayona's hold."

In fact we must practically regard all these Celtic districts as for a considerable period almost forming one body or confederacy, linked very closely by their ecclesiastical usages, which they were maintaining in conscious opposition to Rome; and in possession of nearly the same poetic traditions and legends (Paulin Paris derives even Nennius from Brittany). In Brittany, though there had been an early connexion with S. Martin of Tours, the Apostle of Gaul (he was similarly revered in Cornwall and Wales), yet the Roman see of Tours, as organized under the Frankish rule, endeavoured for a long time in vain to establish a supremacy over Dol. The missionaries from Tours evidently could not penetrate the forest of Brékilien, and their Christianising efforts were practically confined to the dioceses of Rennes and Nantes, and probably the south of Vannes. But the British emigrants had planted the whole coast, and even penetrated into the heart of the forest at S. Méen; a story in Hoveden ii. 136 shows a kind of connection still between this monastery and that of Bodmin in Cornwall as late as 1177. Ultimately of course the steady pressure of the Papal and French powers won the day, and Dol and Brittany equally lost their independence. The struggle is curiously like that of S. David's against Canterbury, as told in Giraldus Cambrensis, who fought it out in his own person. The diocese of Whitherne (Candida Casa) in Strathclyde similarly had to submit, and Iona lost its hold over Scotland.

The latter part of the volume contains a critically sifted account of the break up of the great kingdom of Northumbria, part of which fell to Scotland and part to England. Hence of course arose claims and counter-claims in endless variety, and our antiquaries still fight out an internecine war on the subject. The archbishopric of York has not had a successful history. Pope Gregory meant it and London to have shared the island between them equally, York having all up to the very north of Scotland. But Canterbury rose in importance with the rise of the southern capital, and the Scottish kings naturally wished to have their church independent of all English influence, and ultimately succeeded in their purpose. The Lothians had once been purely English, and even Fordun describes Stirling as a "*locus marchialis, Scotiam et Britanniam intermedians sive connectens*," and the bridge there over the Forth as "*inter Britanniam et Scotiam, utriusque marginem apprehendens*." But York in vain made efforts to keep up lines of bishops in the Orkneys and at Whitherne and at Glasgow; the Popes ultimately declared the Scottish bishoprics dependent on no one, save immediately upon the Apostolic See. When the kingdom became independent, it was impossible to keep the national church dependent on England; the question no longer rested on disputed documents. The early history of the church of Scotland during the Celtic period is treated with great care, but in Pictish history a probable guess is all that is possible. The Irish Scots were already Christians when they settled in

Argyllshire, and S. Columba and his missionaries from Iona evangelized the northern Picts as vigorously and successfully as their successors did the people of Northumbria, and Mercia and Essex. The account of the Culdees in appendix B is admirably done, the ground having been once for all cleared by Dr. Reeves. These foundations, perhaps beginning about 800, in time followed a like course of deterioration with the similar Irish and with the Celtic Welsh monasteries; and partly by their own decadence, but perhaps more through English ecclesiastical influence (which began with Malcolm and Margaret, and culminated under King David), they, with the other monasteries of an Irish type, were either transformed or destroyed by a revolution beginning about the middle of the twelfth century, being principally converted into the monastic order nearest akin to them, viz. Augustinian canons; by the middle of the fourteenth century they had disappeared altogether, even in name. The old view of them may be seen in its best form in Campbell's poem of Aodh and Reullura. Nearly all the Scotch missionaries on the continent came from Ireland, the only one perhaps from Scotland itself being S. Cadroe, Abbot of Metz, who died about 978.

Among the collections printed in this volume some of the most curious are the Canons of Adamnan (p. 111), which mostly relate to unclean meats, and afford a valuable specimen of the way in which the early missionaries tried to adopt certain Biblical precepts to a barbarous mode of life. The first one runs thus:—"Marina animalia ad littora cadentia, quorum mortes nescimus, sumenda sunt sana fide, nisi sint putrida." In p. 119 is the Rule of S. Columba (probably compiled after his death), which is very striking. Part of it seems to be arranged by threes, e.g. "Take not of food till thou art hungry, Sleep not till thou feelest desire, Speak not except on business."

This first part of the second volume has been published separately, as the death of the lamented editor, Mr. Haddan, by which the whole church of England suffers a severe loss, has prevented the completion of the part relating to Ireland. But the work already done has been done once for all; the early evidence will not need another such critical and conscientious examination as Mr. Haddan has devoted to the records of the early Celtic churches of Great Britain.

C. W. BOASE.

Intelligence.

It is known that the victor in one or more of the principal contests at Olympia was entitled to have a statue erected there in his honour at his own expense or at that of his friends or townsmen. In the case of a victory in the horse or chariot races, the memorial would of course take the form of a chariot group or an equestrian figure. To maintain the local pride in a success of this kind, whether at Olympia or at any of the other national Greek games, various measures were taken, and among them that of striking a coin bearing an obvious illustration of the event, as is attested by the two instances of Anaxilaos, the tyrant of Rhegium, and Philip of Macedon, the father of Alexander the Great. This method of commemorating a victory at the national games has been lately brought into prominence by a paper *On the coins of Kamarina*, in Sicily, contributed to the *Transactions of the Royal Society of Literature*, N.S., x., Pt. iii., by Mr. R. S. Poole, the Keeper of Coins and Medals in the British Museum. After showing, without room for doubt, that the coins of Kamarina with the figure of a quadriga driven by Pallas, towards whom a Nike reaches a wreath, must have been struck at the time when Psamius of that town gained the chariot victory celebrated by Pindar in the fourth Olympian Ode, Mr. Poole proceeds to compare the other coins of Sicily, on which agonistic types occur, with the recorded facts as to victories gained by citizens or rulers of these towns. The result is full of interest, and may be taken as opening up a question the pursuit of which must be largely to the advantage of the history of Greek art. Another question of the same class, the comparison of types on coins with the existing descriptions of celebrated statues, deserves more attention than appears to have been bestowed on it hitherto by numismatists. Meantime it may be worth while to point out that Alcibiades

is said to have commemorated his victories at the national games by two paintings, in one of which he was represented in the act of being crowned by Olympia and Pythia, not it should be observed by Nike. With this analogy it is possible to conceive that the winged female figure represented on the Sicilian coins as in the act of reaching a crown towards the charioteer, may be a personification of Olympia or one of the other localities where national games were held. As regards the amphorae on the coins of Kamarina, it may be, as Mr. Poole suggests, that such vessels filled with sacred oil were given as rewards to the victors. This was the case at the Panathenaic games, but as yet we have no evidence of such a proceeding at Olympia. At the same time, and in the absence of proof to the contrary, it is quite possible that second and third prizes consisted of substantial rewards of this kind.

At the annual meeting of the British Archaeological Institute, lately held at Exeter, Dr. E. A. Freeman read a valuable paper on "The Place of Exeter in English History," which was reported in several journals. We take our account of it from *Nature*, Aug. 7. Dr. Freeman had already sketched the history of the place in the fourth volume of his *Norman Conquest*; he now traced its growth from an original Celtic hill-fort into a Roman city, which had lived on through the Teutonic Conquest, and which still, after all changes, kept its place as the undoubted head of its own district. In Wessex such a history is unique; the continuity of its being is more perfect than that of most of the cities of Northern Gaul. He said that he could not answer his own first question, "When did the Celtic and Roman city first become a West-Saxon possession?" The first undoubted mention of it was in the days of Alfred, but it did not become wholly English in blood and speech until two centuries later. In Athelstan's day the city was still partly Welsh, partly English, each forming a city within a city. Athelstan drove out the British inhabitants and fortified the place by a wall. Dr. Freeman then traced the course of events through the Danish and Norman times. By the Norman Conquest it was settled for Exeter that she was to be an English city, not a separate commonwealth like the independent cities of Germany.

The view that Exeter, and Devonshire in general, were mainly Celtic until Athelstan's time has since been controverted in the *Pall Mall Gazette* by a writer who thinks little stress can be laid on the somewhat late account of Athelstan's proceedings given by William of Malmesbury, and that Devonshire became English much earlier. There are some grounds for this view. The Cornish parishes still retain the names of Celtic saints; in Devonshire there are very few traces of Celtic names; the Tamar is the Celtic boundary. In fact the Celts of Cornwall (not of Devon) helped the Danes against the English, and Egbert's victory over them was at Hingston Down, west of the Tamar. Athelstan, who conquered Cornwall, is traditionally connected with the conventual foundations at S. Germans, Bodmin, and Burian. There is no need to deny that there was a Celtic quarter in Exeter in Athelstan's time. Some of the parishes still show Celtic names, e.g. S. Petrock, and in a paper read at the Institute Mr. Kerslake tried to ascertain what parts of the city were occupied by the Celts and Teutons respectively—Dr. Freeman said that Mr. Kerslake had cleared up some of his difficulties about the walls—a good instance of the way in which the historian and the local antiquary may help each other. There are other grounds also for thinking that the English occupied Devon at an early time. If the Adescanaster where S. Boniface received his education was Exeter, there must have been already an English monastery there. We trust that Dr. Freeman, having taken up this interesting subject, will now work it out in a thorough manner.

We have received an excellent number of the *Cape Monthly Magazine* (April, 1872), which shows that our people at Cape Town take an interest in old English history. It contains an article by Dr. W. H. I. Bleek on "The Graham MS. Chronicles of England." The Mr. Graham to whom the MS. belongs represents, we believe, the Grahams of Fintry. The history of the MS. itself would be valuable, and Mr. Graham should give it himself. The first part seems to be an abridged form of the well-known chronicle, the *Brut*; the latter contains a series of small treatises, the chief value of which consists in the full-length miniature portraits of the Conqueror and the ten following kings, painted in the middle of the fourteenth century. The portraits of Edward III., the Black Prince, and Richard II., by a contemporary hand, are most likely faithful likenesses. On fol. 47 is a document in Anglo-Saxon which would be worth copying. It is not improbable that the volume once belonged to James I., but we should like to know more of its history. Dr. Bleek has given a few lines from the beginning and end of each piece which will assist in their identification.

New Publications.

- BALAN, Prof. P. Storia di Gregorio IXe dei suoi tempi. Fasc. 15-16. Modena: Tip. del Commercio.
 BAUCH, G. Ueber die Historia romana d. Paulus Diaconus. Eine Quellenuntersuchg. Göttingen: Peppmüller.
 BIBLIOTHECA rerum germanicarum. Tom. VI. Monumenta Alcuiniana a Ph. Jaffeo præparata. Ediderunt Wattenbach et Duemmler. Berlin: Weidmann.

CARAVEN-CACHIN, A. Sépultologie française. Sépultures gauloises, romaines, et franques du Tarn; suivies de la carte archéologique de cette contrée aux époques antéhistoriques gauloises, romaines, et franques. Castres: Huc.

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Philology.

Original Sanskrit Texts on the Origin and History of the People of India, their Religion and Institutions. Collected, translated, and illustrated by J. Muir, D.C.L., LL.D., Ph.D. Vol. 4. Comparison of the Vedic with the later representations of the principal Indian Deities. Second Edition, revised. London: Trübner & Co. 1873.

A SUCCESSFUL elucidation of the history of the religious development of India would do more than anything else to advance our knowledge of the development of the religious impulse in mankind. On the one hand the Indian religion has roots reaching back to an extremely distant period; for, as is proved by the agreement of many essential elements of Vedic religion with corresponding ancient Greek, Italian, German, and Slavonic ones, the Vedas reflect, in the main, the religion of the Indo-Germanic race, as this had constituted itself before the separation of the different branches; that is to say, to a time long—at least some thousand years—prior to the beginning of our history. On the other hand, again, the Vedas form the groundwork of all the later religious formations of India, which, their variety notwithstanding, have all sprung from this original germ, and grown up independently without suffering any profound modification from foreign nations; so that in Indian religion we can trace the only really free development—nearly undisturbed for well nigh six thousand years—of the religious impulse amongst the Indo-Germans.

Besides this, in Indian literature an abundance of auxiliary facts have been preserved, which, if they do not suffice to explain the development exhaustively in all its aspects, at least throw light upon many sides of it. The external side of Indian religion, the mode and the objects of worship, is already known for many periods, and for others appears discoverable. The speculative and philosophical development which unfolds itself in connection with the religion receives countless illustrations from Indian literature. Our sources of information are scantier respecting the ethical fabric to which this served as foundation; but here too it is possible to draw more conclusions than might be expected

at first. As to the point of most importance for the right judging of a religion, that singular copy or off-print of the human mind, in which the highest product of the native human striving after ideal completeness, is made serviceable to deep and urgent practical necessities,—the way in which it works and lives in a whole people, how it elevates or debases them, ennobles or degrades, gives strength or weakness, refines or deadens the feelings; the class of feelings which it calls chiefly into play, the degree of depth, and intimate self-devotion which it may succeed in inspiring, in what relation the action of the religious stands to the critical spirit and to what extent it controls the latter or is limited, guided, and controlled by it;—these and similar questions may be determined with tolerable certainty for many periods, especially those beginning approximately with the present era. The Mahābhārata, the Purāṇas, the glorifications of particular holy places therewith connected, the didactic literature, religious poems, mystical writings, those concerning superstition, and others of the like kind, allow us to see further into the religious life of the Indians than, perhaps, into that of any other people. What is seen there is certainly by no means always agreeable, but one also finds, between whiles, so much profound, intimate, and thoughtful tenderness that one is disposed to overlook many errors for the sake of the wonderfully deep and pure source whence they flowed at starting.

The work to which these remarks are devoted offers excellent assistance towards the attainment of exacter insight into a very essential part of this religion. It deals, indeed, only with a small number of Indian divinities; but those considered are such, especially Viṣṇu and Śiva, as have long occupied the highest place in the Indian Olympus, and the manner in which they are discussed by the author is exactly calculated to furnish a secure foundation for the history of their development from the time of the Vedas to that of the Purāṇas.

The work is a second edition, enlarged in various ways; the first was gratefully utilized by all who were interested in India and the religious life of humanity, and all the praises accorded to it, in public and in private, are equally well deserved—in some cases even better deserved—by the present edition.

The work consists substantially of a collection of passages from Indian, especially from Vedic, writings which contribute to a knowledge of the nature and the historical development of the divinities therein treated. They are printed in the original, accompanied by a careful and excellent translation, in the preparation of which no valuable aids have been neglected. To these are subjoined explanatory considerations, which must always be read with great interest; even though it may be foreseen that additional materials and a more searching examination of those already known will cause them to undergo considerable modification.

THEODOR BENFEY.

Hartel's Homeric Studies. [*Homerische Studien: Beiträge zur homerischen Prosodie und Metrik.* Von Wilhelm Hartel.] Berlin. 1873.

THIS work is an example on a limited scale of the remarkable impulse which the modern Science of Language has given to Greek, and especially to Homeric studies. The notion which lies at the root of that science, of a gradual and perfectly continuous process of change going on in every language and forming its history, is eminently applicable to Greek, because there is no language of whose history we possess so complete a series of records. In Homer we have a specimen of Greek which takes us back a considerable way towards the period at which it parted from the cognate languages. Homer accordingly is the field on which the older Philology receives the greatest amount of help from the

modern "Science of Language." And this help extends to every part of Homeric criticism—the "higher" as well as the "lower." On the one hand the comparison of Sanscrit and other Indo-Germanic languages serves to explain and defend many grammatical and metrical peculiarities, and on the other hand it throws light on the relations of the Epic dialect as a whole, and therefore on all the questions of time and place which make up the Homeric controversy.

The present work (an octavo of 126 pages) deals with the irregular lengthening of short final syllables in the Homeric poems. It first appeared in the Transactions of the Vienna Academy, and was reviewed in an admirable paper by Dr. Georg Curtius, in the fourth volume of his *Studien zur Griechischen und Lateinischen Grammatik*. The present edition contains some fuller discussion of points on which Curtius had expressed his dissent.

The discovery of the Digamma, as Dr. Hartel points out, first gave scholars the hope of explaining the metrical difficulties of Homer, and thus of restoring an original smoothness to his text. Until then every irregularity was classed as a "poetical licence," due to the necessities or convenience of the versification. At first it was imagined that the Digamma would serve as a universal solvent; a "Digamma" was introduced wherever the metre called for the remedy. It was soon found however, with the advance of the Science of Language, that in a large number of cases the Digamma could not be introduced. Some scholars, in particular C. A. I. Hoffmann in the *Quaestiones Homericae*, and H. A. I. Ahrens, sought for other "lost consonants." Observing that short final vowels were often lengthened before liquids, they supposed the existence of combinations such as $\sigma\mu$, $\sigma\nu$, $\gamma\nu$, $\delta\nu$, $\sigma\rho$, $\sigma\lambda$, of which the first consonant was afterwards lost. These double consonants, they thought, either were pronounced in the age of Homer, or had left as a trace of their former presence the tendency to double the initial liquid after a vowel. The success of this mode of explanation was considerable, but still only partial. In the case of the ρ the number of roots which can be shown to have originally begun with $F\rho$ or $\sigma\rho$ is so large that nearly every instance of a short vowel lengthened before initial ρ may be explained by position: and it may further be held that the instances of lengthening have been so numerous as to create a new general rule. In other words, $\rho\acute{o}\sigma$ was at first $\sigma\rho\acute{o}\sigma$, and therefore $\kappa\alpha\tau\grave{\alpha} \rho\acute{o}\sigma$ was pronounced $\kappa\alpha\tau\grave{\alpha} \sigma\rho\acute{o}\sigma$. When the σ was lost this might become $\kappa\alpha\tau\grave{\alpha} \rho\acute{o}\sigma$, just as in French we have *il parle*, but *parlet-il*. Finally, the number of instances like $\kappa\alpha\tau\grave{\alpha} \rho\acute{o}\sigma$ might create a habit of lengthening any vowel before initial ρ , as we find done in Attic. So far everything seems plain: but when Hoffmann and Ahrens proceeded to apply this method to the cases of short vowels lengthened before other liquids, especially μ and λ , they were led to propose a number of untenable etymologies. The difference between ρ and μ appears very strongly when the statistics are drawn out for each. Out of 126 lengthenings before ρ there are 85 which can be etymologically explained: out of 321 lengthenings before μ there are only 11. It may be suggested that the loss of σ before μ occurred earlier and left fewer traces than the loss of F and σ before ρ : but, on the contrary, the combination $\sigma\mu$ is not very rare in later Greek, whereas $F\rho$ and $\sigma\rho$ became extinct.

Dr. Hartel, following Hoffmann, has drawn a careful distinction between the cases in which the cause of lengthening can be traced in the history of the final (short) syllable and those in which it seems to reside in the initial consonant following—between cases (to use the convenient German words) of old "Auslaut" and old "Anlaut." The most valuable part of his conclusions, according to Dr. Curtius, is that which relates to "Auslaut." The original length of the

of the Dat. Sing., of the α of the Neut. Plur., and of many stems in ι and υ (βλοσυρώπις, βρωτός, &c.) seems made out. That the $\alpha\upsilon$ and $\alpha\upsilon$ of the 3 Plur. were pronounced $\alpha\upsilon\upsilon$, $\alpha\upsilon\upsilon$ (original $\alpha\upsilon\tau$, $\alpha\upsilon\tau$) seems very possible, but the instances are not numerous. On the influence of initial consonants on a preceding vowel there is less agreement. Dr. Hartel shows very happily that the lengthening cannot take place if there is any pause in the sense between the two words: in short that it depends on the words being run together in pronunciation. So far however Dr. Curtius is at one with him. The point at issue (if we have rightly understood the controversy) is this: Dr. Hartel regards the tendency to "doubling" as inherent in the nature of the liquids. It is not strictly a doubling, but a thickening or lengthening of the consonantal sound. This thickening he conceives is liable to be produced by the arsis or metrical stress, much as the doubling of consonants in Italian has been produced (*parlerotti* for *parlerò-ti*, &c.). Dr. Curtius clings to the etymological explanation, but he supplements it by other considerations deserving of the greatest attention. The influence of false analogy—custom which once was rational creating custom which is irrational—is always potent in the development of language. But the Homeric language, he shows, must be treated as a whole, and with regard to its peculiar character and history. It is impossible to believe that the dialect, as we find it in the poems, was spoken by a single people at any one time. It has all the characteristics of a poetical and conventional dialect, formed by the singers of many generations, in which new and old were blended in successive layers and in ever varying proportions. A large proportion of the poems is made up of traditional formulae which the author or authors (for in this point of view the question of authorship makes no difference) found ready made, and employed as the established materials of the art. But since the language was constantly changing, these formulae must have presented much that was obsolete, both in grammar and metre, when the poems were composed. These obsolete features then must have been felt partly as archaisms, partly as irregularities. In both characters they were likely to be imitated: for Greek literature in all periods shows the tendency to choose or form a style, a conventional artistic dialect suitable to each form of art. Thus in Dr. Curtius' words, "much seemed to be *licence* which in reality was *archaism*:" and the effect was not only that real archaisms gave birth to imitative pseudo-archaisms, but also that the original strict rules of the metre were materially loosened. This was especially the case from the loss of the Digamma. Originally, in all probability, the rules regarding Hiatus were strictly observed. Then came the loss of the Digamma, and not only created a number of cases of Hiatus, but created the impression that irregular Hiatus might be occasionally tolerated.

It would be impossible in a short space to do justice to the arguments of each side of this interesting controversy. One consideration on which Dr. Hartel lays considerable stress, may be noticed. He finds that in Hesiod and the Homeric Hymns the number of metrical irregularities of the kind in question is much smaller, and chiefly found in direct imitations or reminiscences of Homer. But, he argues, if there had been a tendency to create such irregularities by false analogy, we should have found them increase instead of diminishing as time went on. Dr. Curtius replies, and apparently with reason, that the period of Hesiod and the Hymns (700-500 B.C.) was one in which the original creative impulse of Epic poetry had virtually died out. Hence the metrical feeling was that of a later time, modified only where the older standards exercised a direct influence. Thus the exceptions were really of the same kind as those which were

occasionally introduced in imitation of the supposed "licence" of Homer by Apollonius Rhodius, or Virgil.

Dr. Hartel's book contains much that is suggestive on wider questions of metre and rhythm. His analysis of the rhythmical value of the punctuation, and his observations on the different force of the arsis in different parts of the verse, are especially valuable. Every scholar must join in the hope expressed by Dr. Curtius that the present book will be followed by at least one other discussing the Hiatus and the Digamma.

D. B. MONRO.

Knös on the Digamma in Homer. [*De Digammo Homericæ Quaestiones.* I. *Scriptit* Olaus Vilelmus Knös.] Upsala: Universitets Arsskrift. 1872.

THIS work (which reached us after the preceding article was written) does not offer so much novelty as that of Dr. Hartel, but possesses in a high degree the merits of care, judgment, and exhaustiveness. It consists of two parts. In the first (which is much the shorter) Dr. Knös examines the metre of Homer with the view of ascertaining the conditions under which the loss of a consonant may properly be inferred. A highly interesting parallel to the way in which such a consonant may be restored from metre alone is given by him from the old Scandinavian alliterative poetry. The manuscripts in many cases, it appears, give words beginning with r where the alliteration requires v , the reason being that when the poems were composed the same words began with the combination vr . A more complete analogy to the Homeric facts could hardly be imagined. In the second part Dr. Knös examines all the words in which a lost Digamma has ever been traced, and devotes separate chapters to the Palatal Spirant and to the combination σf . As instances of judicious treatment of uncertain or contested matter the reader may look at his account of $\epsilon\pi\sigma$, p. 86-88; of $\epsilon\pi\mu$, p. 127, where he rightly follows Bekker in making it a neut. adj., not an instrumental case; or of the distinct verbs $\epsilon\pi\omega$ I draw and $\epsilon\pi\omega\mu\alpha\iota$ I shelter. On the general question of the restoration of the Digamma to the text, and the impossibility of carrying out uniformity, he says simply and conclusively that if we must admit such doublets as $\sigma\upsilon$ and $\sigma\upsilon\sigma$, $\pi\acute{o}\lambda\iota\varsigma$ and $\pi\acute{o}\lambda\iota\varsigma$, $\kappa\iota\delta\eta\mu\alpha\iota$ and $\sigma\kappa\iota\delta\eta\mu\alpha\iota$, $\lambda\chi\iota\lambda\lambda\epsilon\upsilon\varsigma$ and $\lambda\chi\iota\lambda\epsilon\upsilon\varsigma$, with many more of the same kind, there can be no fatal objection to recognising such doublets as $\alpha\upsilon\alpha\gamma$ and $\phi\alpha\upsilon\alpha\gamma$, $\alpha\iota\upsilon\sigma$ and $\phi\alpha\iota\upsilon\sigma$. The addition of an index and table of contents would have been useful.

D. B. MONRO.

Intelligence.

We are most glad to learn on the best authority that Dr. Strack, who is now at St. Petersburg, has obtained the consent of the Imperial Government to the photo-lithographic reproduction of a Hebrew MS. of the "later prophets," important not only from its antiquity (date A.D. 916), but from its being provided with the Assyrian-Babylonian accents and vowels. A description of the MS. will be found in Dr. Pinner's *Prospectus der der Odessäer Gesellschaft gehörenden Manuscripte* u. s. w., pp. 18-28, and in Dr. Strack's excellent little work, which we once again earnestly recommend to the student, *Prolegomena critica in vetus Testamentum Hebraicum*, p. 52. The number of copies will be limited to 250.

New Publications.

- BLOCHMANN, H. The Prosody of the Persians, according to Saif, Jami, and other writers. Trübner.
BOMBAY SANSKRIT TEXTS. No. IX. Nāgajibhatta's Paribhāshendusekhara. Ed. Dr. F. Kielhorn. Part II. Translation and Notes. Trübner.
BÜTTNER, E. Ueber das Verhältniss v. Vergils Eklogen zu Theokrits Idyllen. Berlin: Calvary.
BUXTORFIUS, J. Lexicon chaldaicum, talmudicum et rabbinicum. Denuo edit et annotatis auxit B. Fischer. 29 Fasc. Leipzig: Schäfer.
DOOLITTLE, J. Vocabulary and Handbook of the Chinese language. Romanized in the Mandarin Dialect. Vol. II. Parts II., III. Trübner.
FÉLIX, P. Las Fados en Cévenos; poème languedocien. Alais: imp. Bruguierolle.

- GUNDERT, Dr. H. A Malayalam and English Dictionary. Trübner.
 HITZIG, H. Beiträge zur Texteskritik d. Pausanias. Heidelberg: Groos.
 JOUANCOUX, J. B. Essai sur l'origine et la formation du patois picard, avec l'indication sommaire des lois de la transformation des mots et leur application à la recherche de quelques étymologies picardes. Amiens: Imp. Caron fils.
 KERN, Dr. H. The Brhat-Sanhitā, or Complete System of Natural Astrology of Varāha-Mihira. Translated from Sanskrit into English. Part V. Trübner.
 LEITNER, Dr. G. W. Results of a Tour in Dardistan, Kashmir, &c. Vol. I. The Languages and Races of Dardistan. Part III. Trübner.
 LEO, F. Quaestiones Aristophaneae. Bonn: Cohen und Sohn.
 NOTICES of Sanskrit MSS. By Rajendralala Mitra. No. VI. (Vol. II. Part III.) Trübner.
 REINHARDT, C. De Isocratis aemulis. Bonn: Cohen und Sohn.
 SAUPPE, H. Symbolae ad emendandos oratores atticos. Göttingen: Dieterich.
 SUSEMIHL, F. De Politicis Aristoteleis quaestionum criticarum particula VI. Berlin: Calvary.

THE ACADEMY.

"INTER SILVAS ACADEMI QUÆRERE VERUM."

Vol. IV.—No. 79.

Readers are reminded that the mention of New Books, Articles, &c., in our lists is intended as a guarantee of their importance.

The Editor of THE ACADEMY cannot undertake to return communications which are not asked for.

The Editor cannot reply to questions from authors respecting the notice of their books.

The next number will be published on Monday, September 15, and Advertisements should be sent in by September 12.

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British Association for the Advancement of SCIENCE,

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The NEXT ANNUAL GENERAL MEETING will be held at BRADFORD, commencing on WEDNESDAY, September 17.

President Designate—Professor A. W. WILLIAMSON, Ph.D., F.R.S., F.C.S., in the place of J. P. JOULE, D.C.L., LL.D., F.R.S., who has resigned the Presidency in consequence of ill-health.

NOTICE to CONTRIBUTORS of MEMOIRS.—Authors are reminded that, under an arrangement dating from 1871, the acceptance of Memoirs, and the days on which they are to be read, are now, as far as possible, determined by Organizing Committees for the several Sections before the beginning of the Meeting. It has therefore become necessary, in order to give an opportunity to the Committees of doing justice to the several communications, that each Author should prepare an Abstract of his Memoir, of a length suitable for insertion in the published Transactions of the Association, and that he should send it, together with the Original Memoir, by book-post, on or before September 1, addressed thus—"General Secretaries, British Association, 22, Albemarle-street, London, W. For Section" If it should be inconvenient to the Author that his Paper should be read on any particular day, he is requested to send information thereof to the Secretaries in a separate note.

G. GRIFFITH, M.A., Assistant General Secretary, Harrow.

Royal School of Mines.—Department of Science and Art.

During the Twenty-third Session, 1873-74, which will commence on the 1st of October, the following COURSES of LECTURES and PRACTICAL DEMONSTRATIONS will be given:—

1. Chemistry. By E. Frankland, Ph.D., F.R.S.
2. Metallurgy. By John Percy, M.D., F.R.S.
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4. Mineralogy. } By Warington W. Smyth, M.A., F.R.S.,
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Officers in the Queen's Service, Her Majesty's Consuls, Acting Mining Agents and Managers may obtain tickets at reduced prices.

Science Teachers are also admitted to the Lectures at reduced fees.

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TRENHAM REEKS, Registrar.

NOTE.—By order of the Lords of the Committee of Council on Education, the instruction in Chemistry, Physics, Applied Mechanics, and Natural History will be given in the New Buildings, in the Exhibition Road, South Kensington.

University College, London. Session, 1873-74.

The SESSION of the FACULTY of MEDICINE will commence on Wednesday, October 1. INTRODUCTORY LECTURE at 3 P.M. by Dr. F. T. ROBERTS, B.Sc.

The SESSION of the FACULTY of ARTS and LAWS (including the Department of the Fine Arts) will begin on Thursday, October 2. INTRODUCTORY LECTURE at 3 P.M., by Professor O. HENRICI, Ph.D. INTRODUCTORY LECTURE for the DEPARTMENT of FINE ARTS, on Thursday, October 2, at 4.30 P.M., by Professor E. J. POYNTER, A.R.A.

The SESSION of the FACULTY of SCIENCE (including the Department of the Applied Sciences) will begin on Thursday, October 2.

The EVENING CLASSES for Classics, Modern Languages, Mathematics, and the Natural Sciences, will commence on Monday, October 6.

The SCHOOL for BOYS between the ages of Seven and Sixteen will RE-OPEN on Tuesday, September 23.

Prospectuses of the various Departments of the College, containing full information respecting Classes, Fees, Days and Hours of attendance, &c., and Copies of the Regulations relating to the Entrance and other Exhibitions, Scholarships, and Prizes open to Competition by Students of the several Faculties, may be obtained at the Office of the College.

The Examination for the Medical Entrance Exhibitions, and also that for the Andrews Entrance Prizes (Faculties of Arts and Laws, and of Science), will be held at the College on the 25th and 26th of September.

The College is close to the Gower-street Station of the Metropolitan Railway, and only a few minutes' walk from the Termini of the North-Western, Midland, and Great Northern Railways.

JOHN ROBSON, B.A.,

August, 1873.

Secretary to the Council.

Junior Assistant for Photographic and Spectroscopic Observations in the Royal Observatory, Greenwich.

An open competition for one situation will be held in London, on Tuesday, September 30th, and following days.

A preliminary examination will be held in London, Edinburgh, and Dublin, on Tuesday, September 16th.

Limits of age, 18 and 25. Application for the regulations and the necessary form should be made at once to the Secretary, Civil Service Commission, Cannon Row, London, S.W.